SFFMA
Volunteer Fire Chief Academy

Sponsored by VFIS OF TEXAS

SFFMA Volunteer Fire Chiefs Academy

Operations Management

Safe Practices

Protective Clothing

Work Environments

Station Activities

Weekend Two (Homework Assignment)

A. What is your current 2016 fire department's operating budget? What was your 2015 and 2014 operating budgets?

B. What is your current 2016 fire department debt service obligations? What was your 2015 and 2014 fire department debt service obligations?

C. Total cost for fire services (all services offered by your fire department) per capita? Using your current budget and population served.

D. Total 2015 responses per 1,000 population (including fire, medical and false alarm responses, etc.). What were your 2014 and 2013 total responses per 1,000 population?

E. What is your number of firefighters per 1,000 people

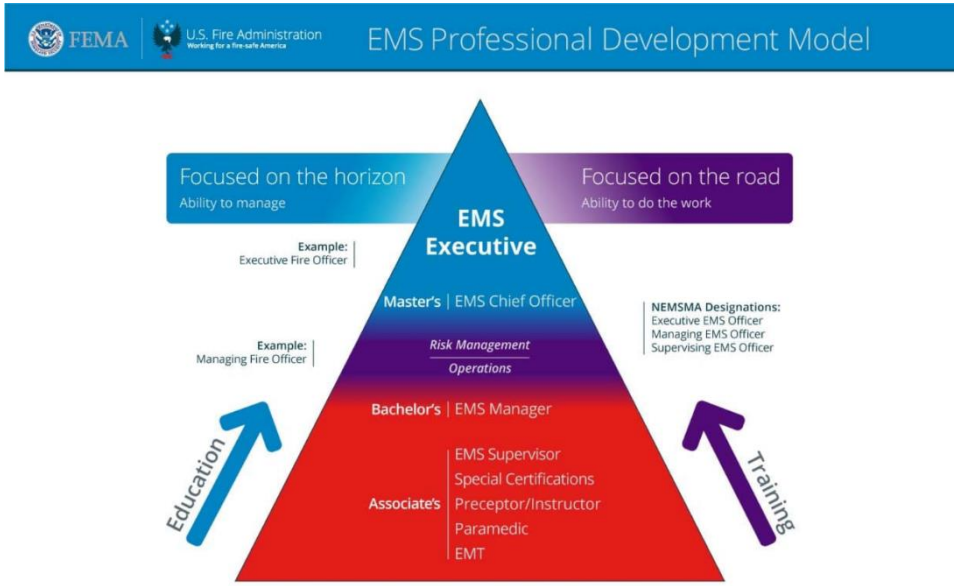
F. What is your present ISO Public Protection Classification?

G. What was your former ISO Public Protection Classification?

H. What is your present fire department's service district size and population?

I. What was your fire department's service district size and population ten years ago?

Fire and Emergency Services Higher Education (FESHE)



Introduction

Risk Management/Safety Programs

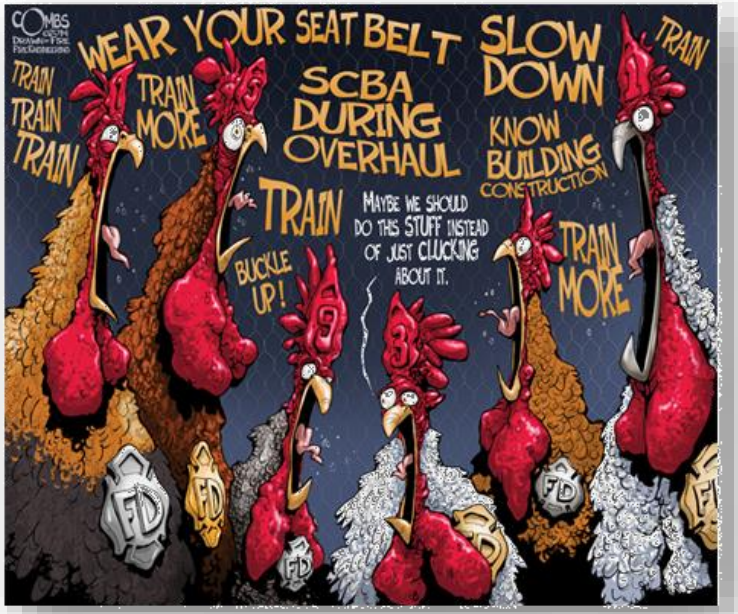
Introduction

- **What is Risk Management?**
  - Enterprise Risk Management (ERM)
- **Fire Ground**
  - Emergency Scene Tactics And Changes
- **Apparatus**
- **Personal Health and Wellness**
- **Station**
- **Resources**
- **Highway Incidents**
- **Hazardous Material Incidents**
- **TIMAS and AHIMTs**

The identification, analysis, assessment, control, and avoidance, minimization, or elimination of unacceptable risks.

Objectives

- Define risk management pertaining to all areas within your department
- Understand five components for the risk management process.
- Identify risk management practices in your agency and the resources available.
- Understand emergency scene tactics and changes occurring



Need (National)

Table A2:
Average Number of Fires and Non-Fire Incidents by Community Size, 2012-2014.

	Community Size									
	1,000,000 or more	500,000 to 999,999	250,000 to 499,999	100,000 to 249,999	50,000 to 99,999	25,000 to 49,999	10,0000 to 24,999	5,000 to 9,999	2,500 to 4,999	under 2,500
Fires	4,597	2,308	988	464	191	106	60	34	23	11
Rescue, EMS etc.,	138,135	64,073	22,857	12,405	4,842	1,944	979	337	164	43
False alarm responses	15,180	5,556	2,110	1,222	567	304	136	54	21	5
Mutual aid responses	1,672	1,198	647	347	196	133	86	55	32	12
Hazardous materials	1,782	779	308	177	84	50	25	11	4	1
Other hazardous	2,108	1,082	594	285	147	72	37	19	9	2
All other responses	83,899	12,631	6,606	2,715	1,139	481	206	78	29	7
Total	252,172	87,559	34,109	17,487	7,003	3,122	1,509	581	278	76

Table 3:
Causes of Volunteer Firefighter Injuries at the Fireground, 2012-2014 Average.

Cause of Injury	Volunteer Only Number	Volunteer Only Percent	All Firefighters Number	All Firefighters Percent
Exposure to fire products	1,125	18.1%	2,615	11.3%
Exposure to chemicals, etc.	160	2.5%	540	2.3%
Fall, jump, slip, trip	1,580	25.3%	5,600	24.2%
Overexertion, strain	1,205	19.3%	6,040	26.1%
Contact with object	870	14.0%	2,575	11.1%
Struck by	240	3.8%	1,210	5.2%
Extreme weather	430	6.9%	760	3.3%
Other	630	10.1%	3,815	16.5%
Total	6,240	100.0%	23,155	100.0%

Source: NFPA Annual Fire Experience Survey, 2012-2014

Volunteer firefighter injuries are based on results for departments that protect communities of less than 10,000 population these departments are comprised mostly of volunteer firefighters.

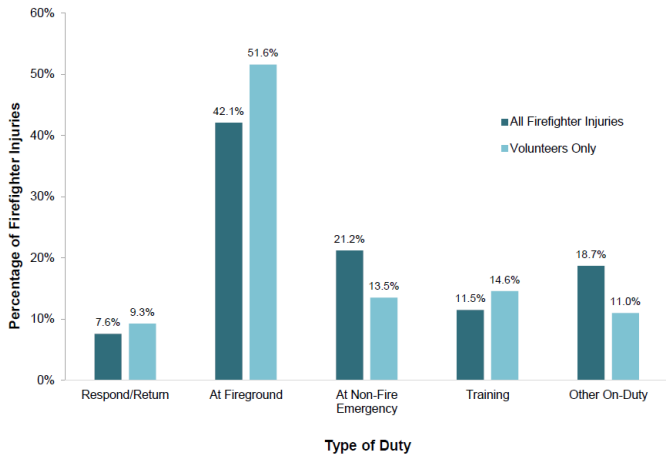
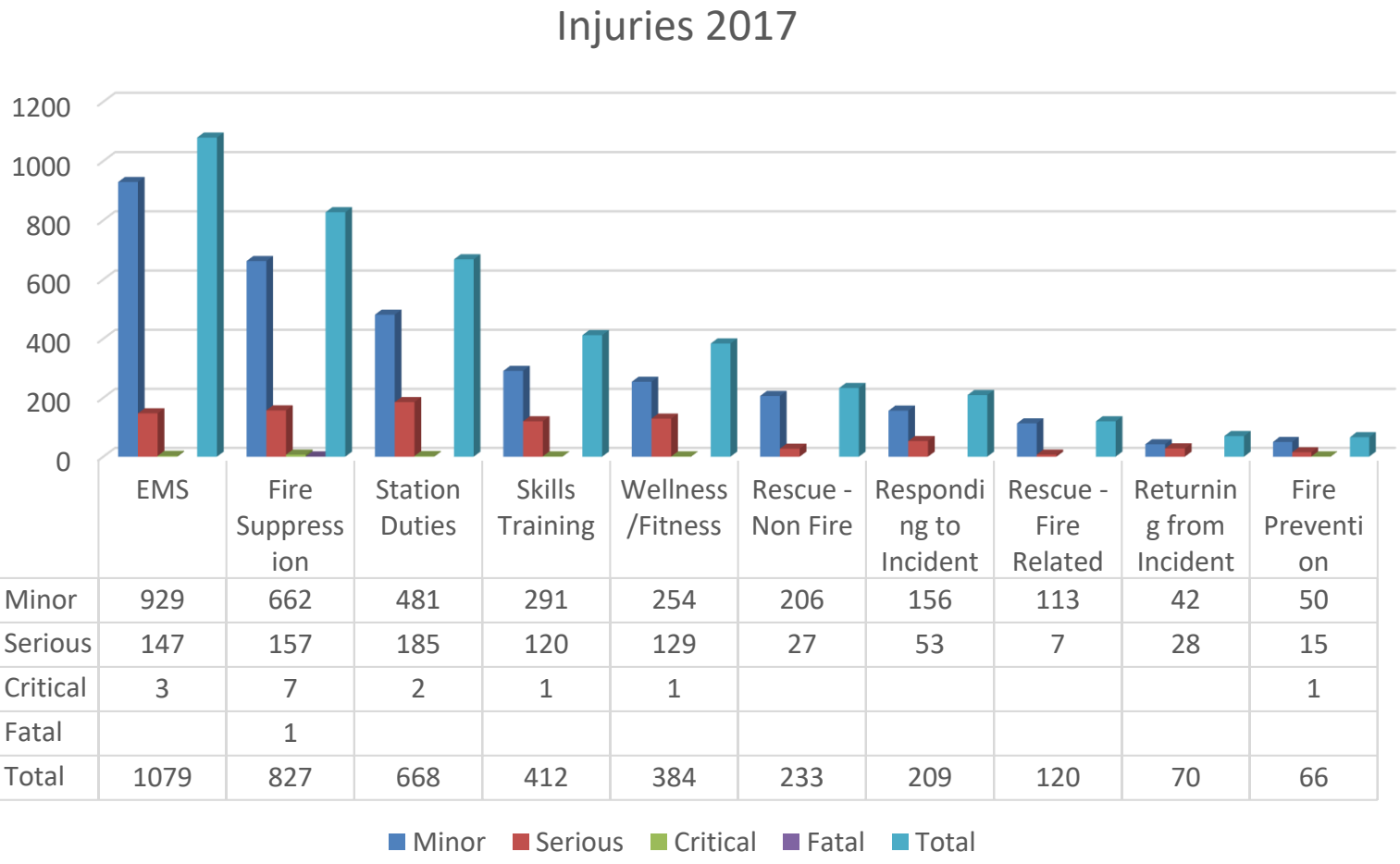


Figure 1: Firefighter Injuries by Type of Duty for All Firefighters and Volunteers Only.

Need (TCFP)



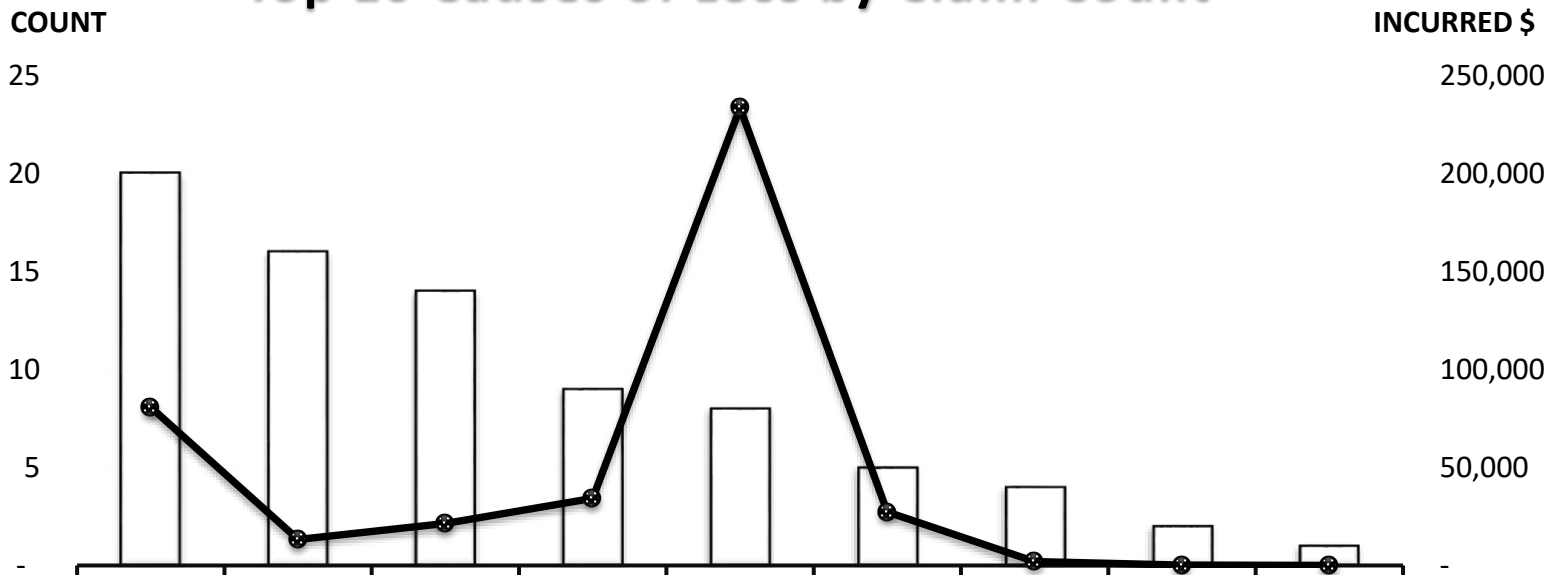
	EMS	Fire Suppression	Station Duties	Skills Training	Wellness /Fitness	Rescue - Non Fire	Responding to Incident	Rescue - Fire Related	Returning from Incident	Fire Prevention
Minor	929	662	481	291	254	206	156	113	42	50
Serious	147	157	185	120	129	27	53	7	28	15
Critical	3	7	2	1	1					1
Fatal		1								
Total	1079	827	668	412	384	233	209	120	70	66

Texas Mutual (1st Qtr. 2016)

Cause of Loss	Specific Cause of Loss	Incurred $	Claims	Per Claim
STRAIN/INJURY	Strain or injury by lifting	40,844	6	6,807
STRAIN/INJURY	Strain or injury by miscellaneous	896	4	224
STRAIN/INJURY	Strain or injury by reaching	23,916	3	7,972
STRAIN/INJURY	Strain or injury by pushing or pulling	5,400	3	1,800
STRAIN/INJURY	Strain or injury by twisting	1,132	2	566
STRAIN/INJURY	Strain or injury by repetitive motion	189	1	189
STRAIN/INJURY	Strain or injury by holding or carrying	8,344	1	8,344
FALL/SLIP OR TRIP	Fall, slip, or trip injury on same level	1,269	6	212
FALL/SLIP OR TRIP	Fall, slip, or trip injury from different level (ele	1,266	6	211
FALL/SLIP OR TRIP	Fall, slip, or trip injury, miscellaneous	10,729	2	5,364
FALL/SLIP OR TRIP	Fall, slip, or trip injury from ladder or scaffoldin	0	1	0
FALL/SLIP OR TRIP	Fall, slip, or trip injury on stairs	0	1	0
INDUSTRIAL HYGIENE	Absorption, ingestion, or inhalation, miscellaneous	21,442	14	1,532
MISC. CAUSES	Miscellaneous - other	34,258	8	4,282
MISC. CAUSES	Miscellaneous - other than physical cause of injury	0	1	0
MOTOR VEHICLE	Collision or sideswipe with another vehicle	1,442	5	288
MOTOR VEHICLE	Vehicle upset	232,199	3	77,400
STRUCK BY	Struck or injured by fellow worker; patient	3,288	2	1,644
STRUCK BY	Struck or injured by motor vehicle	0	1	0
STRUCK BY	Struck or injured by object being lifted or handled	24,034	1	24,034
STRUCK BY	Struck or injured by falling or flying object	0	1	0
CUT/PUNCTURE/SCRAPE	Cut, puncture, scrape, injured by miscellaneous	404	2	202
CAUGHT IN/UNDER/BETWEEN	Caught in, under, or between machine or machinery	186	1	186
STRIKE AGAINST	Striking against or stepping on stationary object	0	1	0

Texas Mutual (1st Qtr. 2016)

Top 10 Causes of Loss by Claim Count



	STRAIN/INJURY	FALL/SLIP OR TRIP	INDUSTRIAL HYGIENE	MISC. CAUSES	MOTOR VEHICLE	STRUCK BY	CUT/PUNCTURE/SCRAPE	CAUGHT IN/UNDER/BETWEEN	STRIKE AGAINST
Claims	20	16	14	9	8	5	4	2	1
Incurred	80,720	13,264	21,442	34,258	233,642	27,322	1,984	186	-
Avg Incurred	4,036	829	1,532	3,806	29,205	5,464	496	93	-

The Real Need

Risk Management

Risk Management/Safety Programs –Session III

Goal

To reduce your liabilities through an informal or formal loss control and risk management practices and/or processes within your department. While identifying resources to help with the implementation phases of these methods.

What Is Risk Management?

- Literally speaking, it begins with the identification and assessment of **risk management is the process of minimizing or mitigating the risk** followed by **optimum** use of **resources** to monitor and reduce the same.
- Risk generally results from uncertainty. In organizations this risk can come from **uncertainty in the work place** (**demand, supply and community market**), failure of projects, expectations, accidents, natural disasters etc. There are different tools to deal with the same depending upon the kind of risk.
- Ideally in risk management, a risk prioritization process is followed in which those risks that pose the threat of great loss and have great probability of occurrence are dealt with first.

Risk Prioritization Process

IMPACT	ACTIONS		
SIGNIFICANT	Considerable Management Required	Must Manage and Monitor Risks	Extensive Management essential
MODERATE	Risk are bearable to certain extent	Management effort worthwhile	Management effort required
MINOR	Accept Risks	Accept but monitor Risks	Manage and Monitor Risks
	LOW	MEDIUM	HIGH
	LIKELIHOOD		

- **The two factors govern the action required:**
  - the probability of occurrence
  - the impact of the risk.

Process of Risk Management

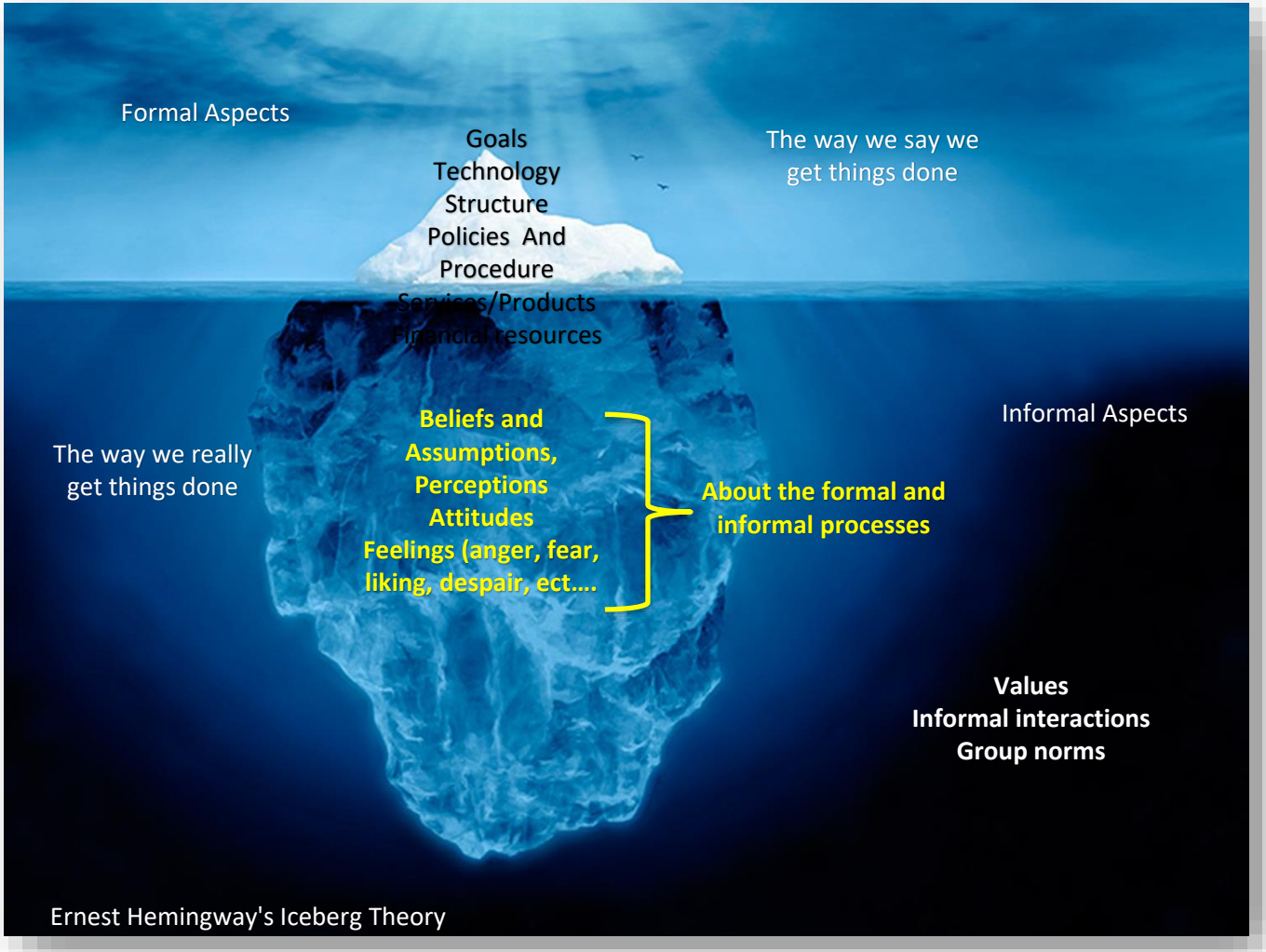
- First step is the assessment of risk
- Evaluation
- Management
- Last step is measuring the impact.

Various Aspects of Risk Management

- **What does risk management mean?**
  - The identification, assessment and planning and controlling social, economic or physical threat to the organization?

- **Is the concept only about transferring the risk or reduce its negative effects?**
  - No - much deeper concept that also involves risk avoiding as well as risk taking. Every work place involves some or other kinds of risk. Sometimes you avoid, sometimes you control the phenomenon and sometimes you simply let it come.

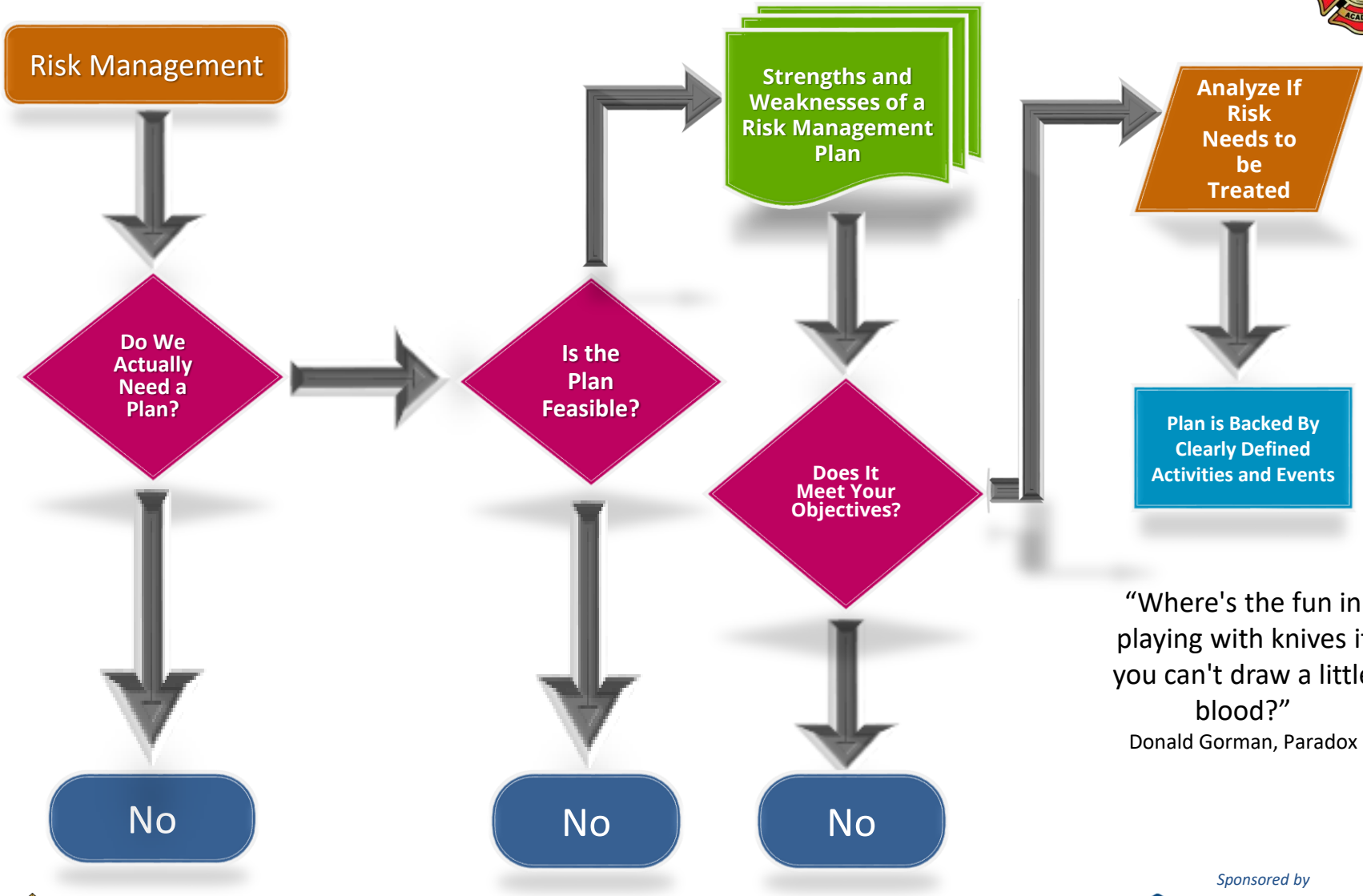
Cultural Iceberg Theory



What are the Benefits of Risk Management?

- More effective decisions
- Efficient allocations of resources
- Increased standard of accountability
- Creativity and Innovation
- Increase capacity to manage competing issues
- Flexibility in meeting objectives
- Transparent decision making

Various Aspects of Risk Management (Cont.)

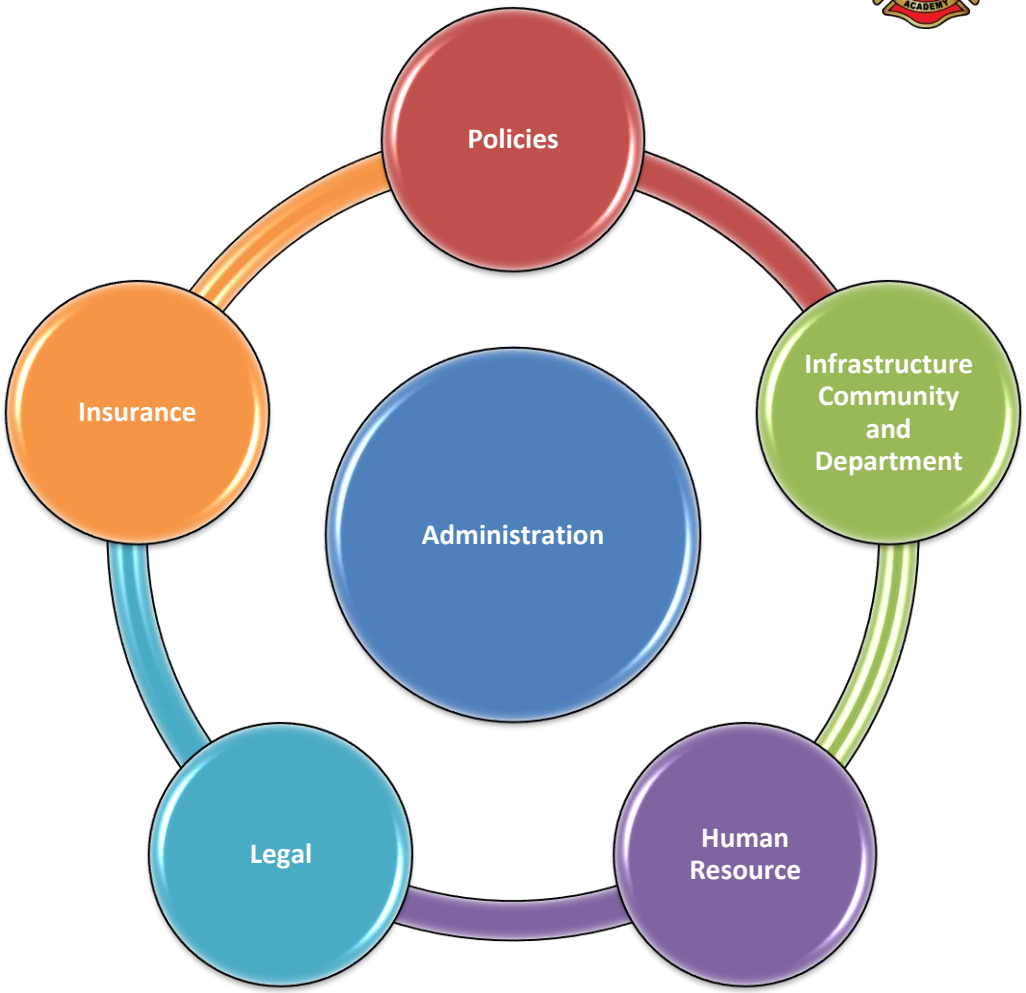


"Where's the fun in playing with knives if you can't draw a little blood?"
Donald Gorman, Paradox

Risk Management Plan

Simply put - A good risk management plan carries number of tools and strategies to mitigate risk. The strategy may be to avoid risk or transfer a component of it to another project so that the impact is reduced.

- **Lists**
- **Prioritize**
- **Action Plan (NIMS)**
- **Team Involvement**
- **Communications**



Enterprise Risk Management (ERM)

In simpler terms Enterprise Risk Management includes all the tools and processes employed by an organization to manage and control risks and grab more opportunities in the market place. It provides a framework for better risk management.

- Exit strategy
- Reduction strategy
- Share or Insure strategy
- Accept strategy

ERM Framework

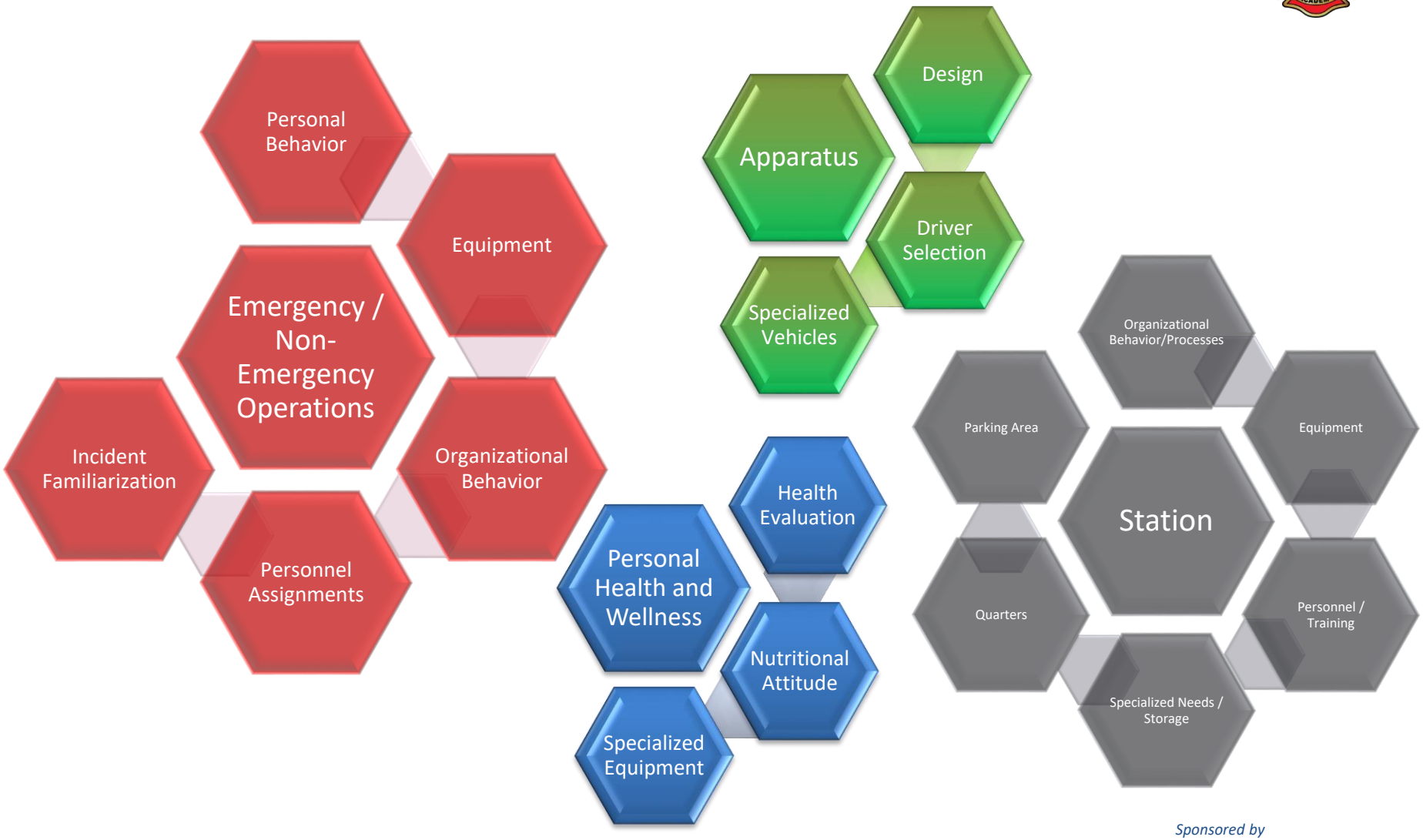
ERM Framework				
Process Steps	Types of Risk			
	Hazard	Financial	Operational	Strategic
Establish Context				
Identify Risks				
Analyze/Quantify Risks				
Integrate Risks				
Assess/Prioritize Risks				
Treat Risk				
Monitor and Review				

- Hazard Risk: Natural disasters, liability damages, Property damages due to fire, tornado etc, injury or illness to its employees.
- Financial Risk: Risks like processing risk, commodity risk, pricing risk, asset risk, liquidity risk.
- Operational Risk: labor relations, customer satisfaction, product failure etc.
- Strategic Risk: Competition, fluctuation in demand and market, regulatory and political trends, social trend, capital availability.

Emergency Service Risk Management

The systematic application of management policies, procedures and practices to tasks of identifying, analyzing, assessing, treating and monitoring risk.

Risk Management and Best Practices



Fire Operations Management

Risk Management/Safety Programs

State Firefighters' &
Fire Marshals' Association of Texas
Promote, Unify, Represent, and Educate The Fire Service of Texas

Sponsored by
VFIS OF TEXAS
Texas Mutual Insurance Company

Objectives

Review Standards and regulations that affect Emergency Operations in Texas.

Explore Staffing issues in Texas Volunteer and Combination Fire Departments.

Discuss Emergency response strategy and tactics based upon available resources.

Modern Firefighting Principles.

Review Rural Water Supply Management.

Standards and Regulations

- Difference between Standards and Regulations
- Standards for Safety and Efficiency
  - NFPA
  - SFFMA
  - OSHA
- Regulations that affect the Fire Service
  - TCFP
  - DSHS
  - DPS
  - OSHA
  - USDOT

Staffing Issues

- **Size DOES matter!**
- **Operational planning must match resources**
- **Intelligent Assessment.**

"Many fire departments are operating at staffing levels below recommended levels, and with the state of the current economy we will likely not see a lot of improvement in the near future. But operating with fewer numbers does not mean our firefighting forces cannot be aggressive, safe and successful.

We must explore tactics, strategies, and philosophies that can help our departments to continue to provide safe and effective firefighting services to our community, even when our department must arrive at the fireground with limited staffing."

Staffing Issues

"Staffing has been a one-way argument for too long. It has stagnated strategic and tactical evolution. We must address successful strategies for operating with fewer people on the fireground because this is a reality. If we ignore this reality and simply keep stating that we must have more, we are increasing firefighter risk. To continue to say that 4 or more is the only way, is dangerous to the reality of 2 or 3 arriving. To continue this way, we only allow two options on arrival,

1) *Do nothing (Unacceptable…what is our mission?) or*
2) *Use tactics and strategies developed for 4 person crews…this WILL result in firefighter injuries and deaths.*

Aggressive strategies CAN be deployed for 2 or 3 person arriving crews.

Aggressive attack does not have to be interior."

Operational Strategies

- History of Firefighting Principles
- UL and NIST Studies
- Modern Firefighting Practices
  - UL \NIST Studies
  - Efficiency and Safety for our customers, both internal and external
  - No Compromise!
  - What are the Opportunities

National Institute of Standards and Technology
U.S. Department of Commerce

Operational Strategies

Modern Firefighting Practices

Flow Path Management

- NIST Wind-Driven Fire Studies
- Air ingress and egress
- Ventilation Limiting
- Control the Door
- Close the Door Message for Occupants

Operational Strategies

Transitional Attack

- Aggressive Interior Attack vs Aggressive Exterior Attack
- SLICE-RS
  - Sample SOG
- RECEO-VS
- VEIS

> ""*Aggressive*" is an ACTION… not a Location!"

Operational Strategies

Modern Attack

- Innovation
- Residential
- Commercial
- Playbook
- CAFS
  - Topeka
  - Shumway

Operational Strategies

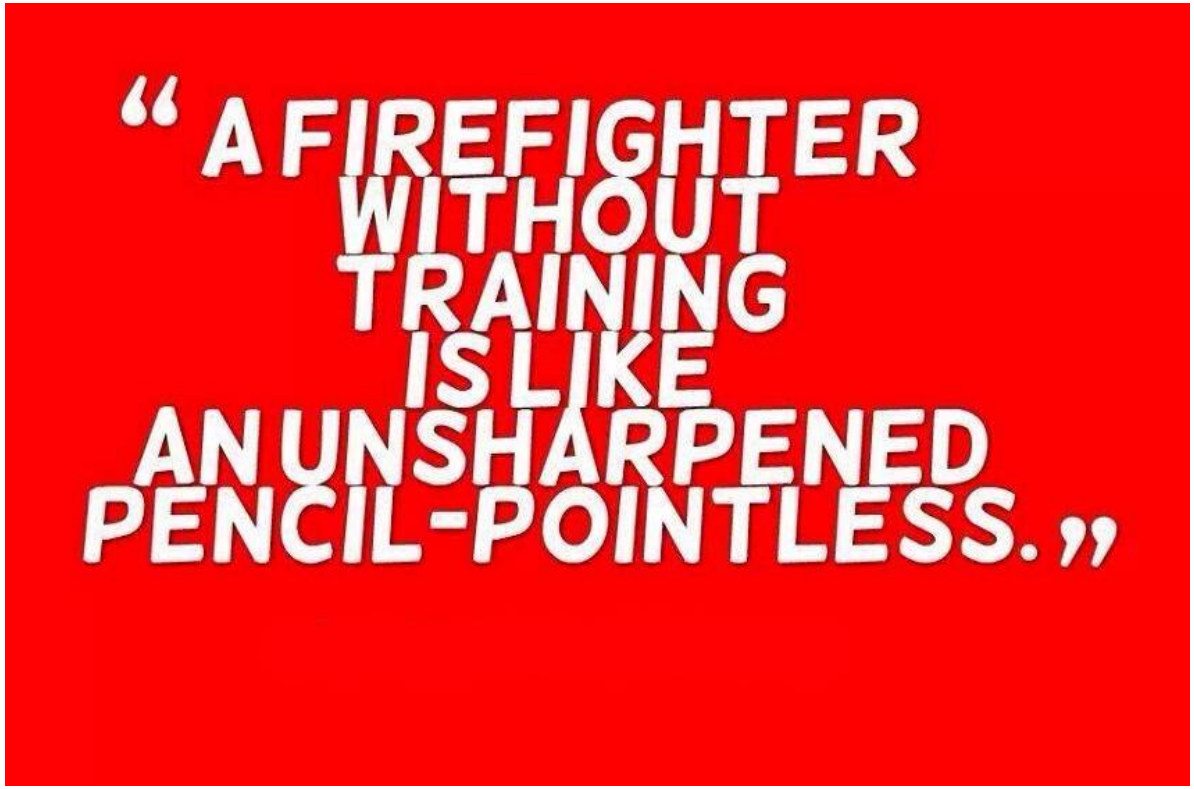
Other Considerations

- Rural Water Supply Challenges
- Stressed Budgets
- Morale

Operational Strategies

And Most Importantly……

TRAINING, TRAINING, TRAINING



Operational Strategies

Additional Resources

- Modern Fire Behavior Handout
- Small Unit Firefighting PPT
- Can You Really Push Fire?
- Flow Paths Rules of Engagement
- Video: LA County- “Softening the Target”
- Fireground Command Sheet
- Art of Reading Smoke

Fire Ground Risk Management

Risk Management/Safety Programs –Session III

Introduction

- Understand a proficiency cycle with the goal of preventing skill degradation and operational deficiencies.
  - Organizational and personal behavior
  - Understand systems for mitigating incident processes.
  - Incident Familiarization
  - Engineering utilization

Concern

The dynamics of emergencies destroy the fabric of safety and normalcy for victims, create hostile environments, and tax the abilities of systems.

Risk Management / Safety Fundamental

- **Normalization of Deviance -** people within the organization become so much accustomed to a deviant behavior that they don't consider it as deviant, despite the fact that they far exceed their own rules for the elementary safety.

(Diane Vaughan Ph.D.)

Normalization of Deviance (Cont.)

Normalization of Deviance (Cont.)

- **Prevention**
  - Understanding
    - Legal Liabilities
    - Policies
    - Training/Education
  - Enforcement
    - Discipline
      - Self
      - Others

Risk Assessment

Risk Assessment/Rules of Engagements			
Fire Fighter Injury/Life Safety Risk	High Probability of Success	Marginal Probability of Success	Low Probability of Success
Low Risk	Initiate offensive operations. Continue to monitor risk factors.	Initiate offensive operations. Continue to monitor risk factors.	Initiate offensive operations. Continue to monitor risk factors.
Medium Risk	Initiate offensive operations. Continue to monitor risk factors. Employ all available risk control options.	Initiate offensive operations. Continue to monitor risk factors. Be prepared to go defensive if risk increases.	Do not initiate offensive operations. Reduce risk to fire fighters and actively pursue risk control options.
High Risk	Initiate offensive operations only with confirmation of realistic potential to save endangered lives	Do not initiate offensive operations that will put fire fighters at risk for injury or fatality	Initiate defensive operations only.

Hazard

Definition

A hazard is any condition, activity, object, substance or force that exists with in the working environment with the potential to cause injury, negatively affect health and/or the environment.

Characteristics

- **Visible Hazard –** those readily seen, heard, smelt, tasted or otherwise sensed
- **Hidden Hazard** – Those not readily seen without prompting or more detail searching.
- **Developing Hazard** – Those which get worse over time, may not be detected without measurement.

10 Rules of Engagement influencing Factors (Cont.)

Parking Lot
For Sale

Enforcement?

Understanding?

- Time
  - Discovered
  - Dispatched
  - Response
  - Equipment deployment / Walk Around
- Apparatus Needed
  - Engines
  - Tankers/Tenders
  - Ladders/Master Streams
- Personnel Needed
  - Rescue/Search
  - Suppression/Attacked Lines
  - Ventilation
  - Rehab.

Time Of Response
Wind
Occupants
Resources
Structure Type
Capabilities
Location And Extent
Time Of Involvement
Involvement Conditions
Occupancy

Hazard and Risk

Hazard/Cause

Source of Danger

Risk/Effect

Exposure of Danger

Hazard and Risk (Cont.)

Hazard/Cause

Source of Danger

Risk/Effect

Exposure of Danger

Hazard and Risk (Cont.)

Hazard/Cause

Source of Danger

Risk/Effect

Exposure of Danger

Hazard and Risk (Cont.)

Hazard/Cause

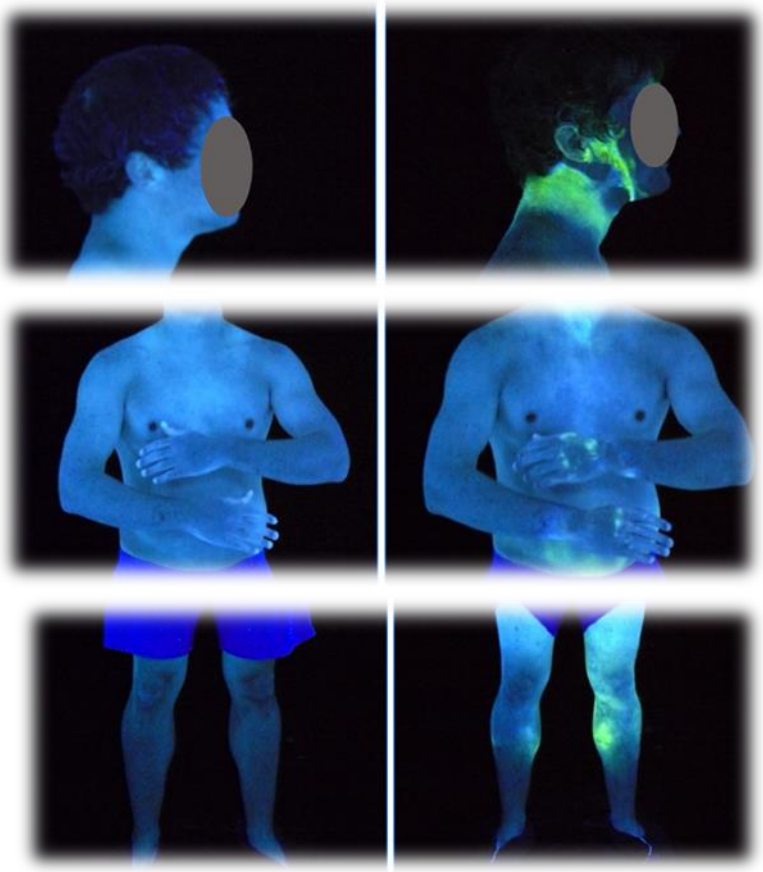
Source of Danger

Risk/Effect

Exposure of Danger

Structural Fire Ground Operations

- **Smoke Toxicity - When inhaled in a low-oxygen environment, cyanide becomes 10 times more toxic. Just the beginning…..**
  - Autopsies and experimental data show that serious injury and death result from exposure to contact irritants, primarily hydrogen chloride, and the central systemic poisons, carbon monoxide (CO) and cyanide.
- **Skin heats it expands which increases external absorption**



Before And After Particle Exposure

Behavioral Risk Assessment

- **Thinksafe - SAM**
  - S – Spot the hazard
  - A – Assess the Risk
  - M – Manage the change
- **PASS**
  - P - Positive
  - A - Attitude
  - S - Safety
  - S - System
- **STOP**
  - S - Step Back
  - T - Think
  - O - Observe
  - P - Proceed

Apparatus

Risk Management/Safety Programs –Session III

Objectives

To procure, operate, maintain, and replace apparatus that will maximize the safety, efficiency, and fiscal responsibility of your Fire Department.

Review the Standards relating to Fire Apparatus.

Understand the Importance of a Documented Maintenance Program.

Understand the need for a planned vehicle replacement program.

Understand the issues involved in purchasing Fire Apparatus.

Standards

- NFPA
- ISO
- NWCG
- TFS

Standards

NFPA

- 1901 - Standard for Automotive Fire Apparatus
- 1906 - Standard for Wildland Fire Apparatus
- 1911 - Standard for the Inspection, Maintenance, Testing, and Retirement of In-Service. Automotive Fire Apparatus
- 1912 - Standard for Fire Apparatus Refurbishing
- 1914 - Standard for Testing Fire Department Aerial Devices
- 1915 - Standard for Fire Apparatus Preventive Maintenance
- 1071 - Standard for Emergency Vehicle Technician Professional Qualifications
- 1002 - Fire Department Vehicle Driver/Operator Professional Qualifications

Standards

ISO

- **Differences exist from NFPA 1901**
- **Engine Company Equipment List**
- **Ladder Company Equipment List**
- **FSRS Equivalency List**

Standards

NWCG

- **NIFC / NWCG**

Standards

TFS

- **HB 2604 Program**
- **HB 2604 Minimum Vehicle Standards**
- **HB 2604 Minimum Vehicle Standards with CAFS**

Vehicle Design

Design:

- Total weight distribution
- Chassis and suspension adequacy
- Vehicle size, location and baffling
- Tires and wheels
- Technological aids (I.e. ABS, driveline retarders, Stability Systems, ect.)

NFPA 1901 & Related Issues

NFPA 1901

- Lighting
- Reflective striping
- Safety enhancements…

NFPA 1901

- **Rear Reflective Markings**
  - 50% of the rear-facing vertical surface of all vehicles must now be covered with reflective red and yellow stripes in a chevron pattern sloping downward from the center of the vehicle at a 45-degree angle.
  - The stripes must be 6” wide, instead of the minimum combined width of 4” specified on the sides and front.
    - Although there is some latitude on the exact shade of yellow to be used, other colors may not be substituted.

Reflective Markings

Documented Maintenance Program

- Importance of documentation
- Standards
- Credentials
- Testing

Apparatus Replacement

- Repair or Replace?
- Apparatus Replacement Planning

Apparatus Purchasing

- Needs Assessment
- Specifications Development
- Purchasing Rules

Objectives

Describe apparatus features that should be considered for increasing the degree of safety.

Introduction

- Types
- Design
- Ergonomic Considerations
- Functional Safety
- Maintenance Processes

Types


Pierce
DEEP SOUTH Fire Trucks
KME KOVATCH
LADDER TOWER CO. A SMEAL COMPANY
SPARTAN ERV
SUTPHEN
E-ONE REV GROUP
HME AHRENS-FOX

Vehicle Design

Design:

- Total weight distribution
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- Vehicle size, location and baffling
- Tires and wheels
- Technological aids (I.e. ABS, driveline retarders, Stability Systems, ect.)

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Reflective Markings

Apparatus Design

Rear Safety Striping

Apparatus Design

Existing Apparatus Design

Jacksonville Beach Fire Department Apparatus

Other Designs

Upgrading or Refurbishing Fire Apparatus

NFPA 1901 – all must Fully enclosed seating meet the current standard

- Warning lights
- Reflective striping
- Slip resistance of walking surfaces and handrails
- A low voltage electrical system load manager
- Where the GVWR is 36,000 pounds or more,
- Ground and step lights
- Noise levels in the driving and crew
- Engine belts, fuel lines, and filters have been replaced
- Brakes, brake lines and wheel seals have been replaced or serviced
- Tires and suspension are in serviceable condition
- All horns and sirens are relocated
- Seat belts are available for every seat and are new or in serviceable condition
- Sign plates are present stating no riding on open areas
- A complete weight analysis shows the fire apparatus is not over individual axle or total GVW ratings
- The fire pump meets or exceeds its original pump rating
- Alternator output meets its rating
- Water tank and baffles are not corroded or distorted
- A transmission shift pump interlock is present
- All loose equipment in the driving and crew areas is secured
- The radiator has been serviced
- If so equipped, the generator and line voltage accessories
- If equipped with an aerial device, a complete test

Conclusion

- Emergency vehicle is designed to do the right job accurately.
- Emergency vehicle visibility and designed as a traffic control equipment to enhance personnel safety
- Ensure all equipment meets applicable requirements

Station

Risk Management/Safety Programs –Session III

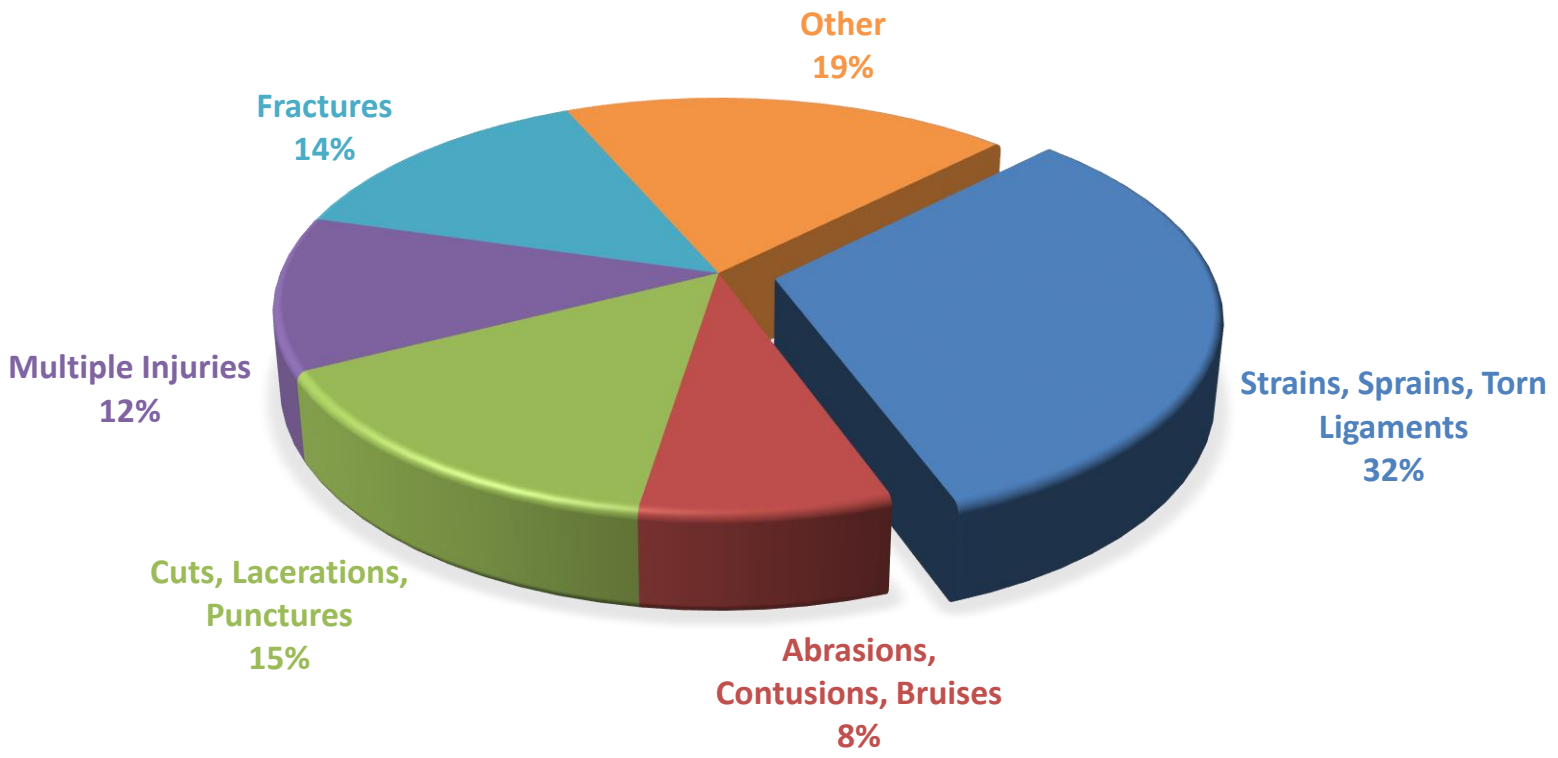
What is a Fire Station ?

- Kitchen Facility
- Eating Facility
- Sleeping Facility
- Personal Hygiene Area
- Office

What is a Fire Station ? (Cont.)

- Garage Facility
- Storage Facility
- Training & Educational Facility
- Social Gathering Place
- Public Occupancy

Station Injuries



Station Designs

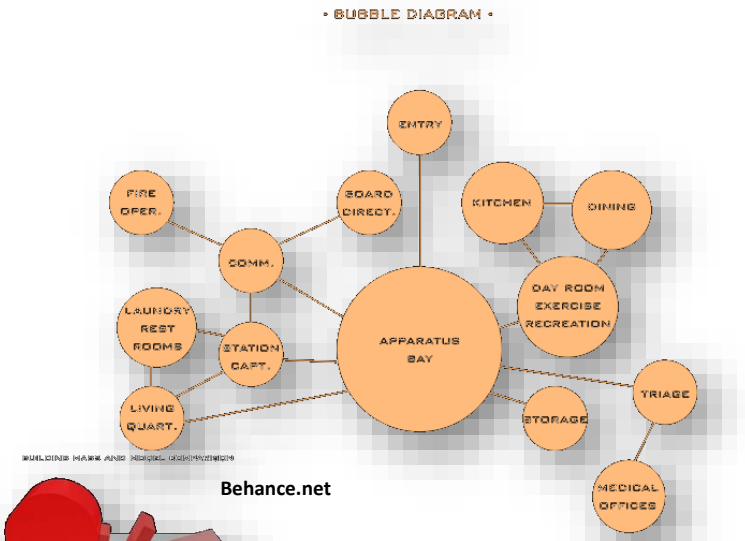
- Exterior/Site Considerations
- Historical Design/Refinements
- Garage Area Hazards
- Storage/Special Use Hazards
- Other/Miscellaneous Hazards

Station Design The Processes

Considerations:

- Land
  - 1 ½ Road Miles
  - Response Time
- Designed Build (Builder Oversite)
- Builder at Risk – (Building Architect Works for Your Interests)
- Flow of People
- Garage Doors/ Traffic
- Medical Room
- Security of Property
- Emotional Safety

Station Design The Processes (Cont.)



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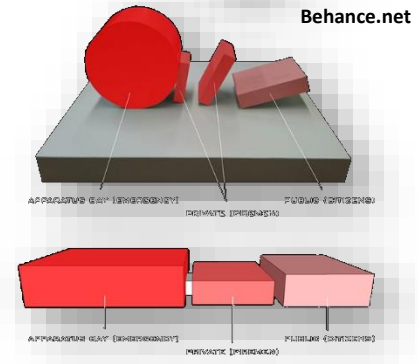

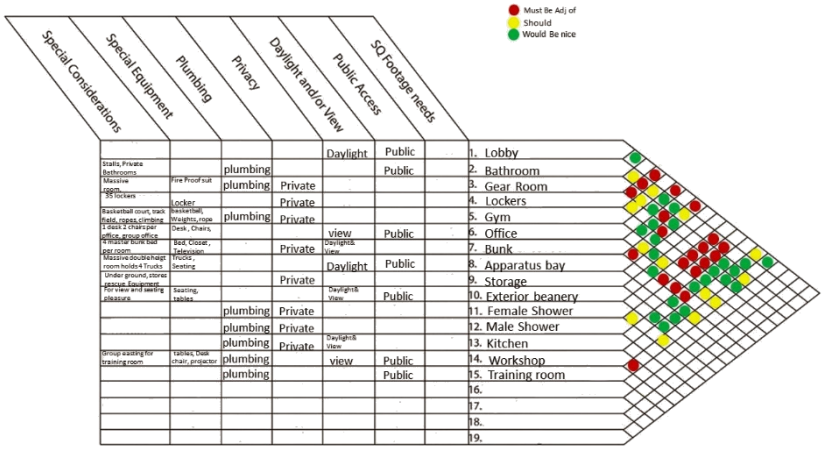

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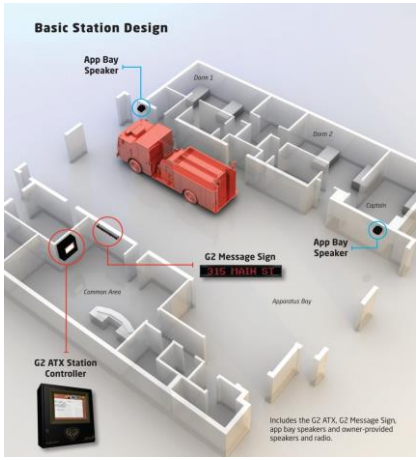
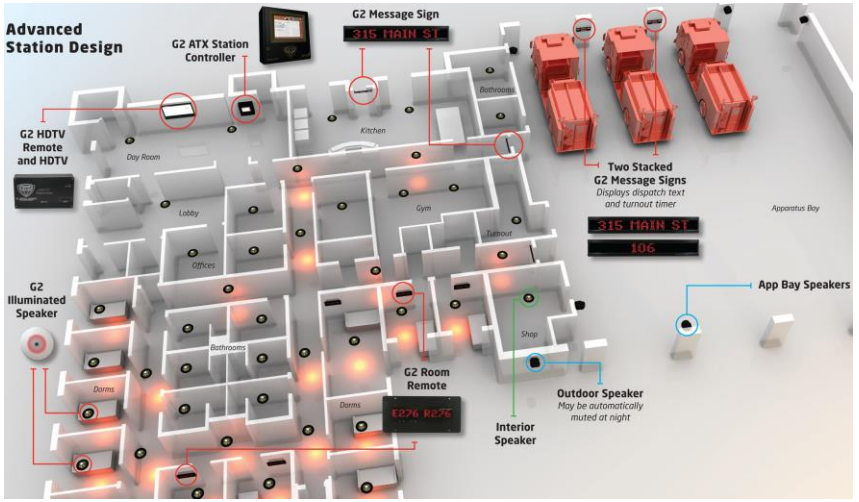
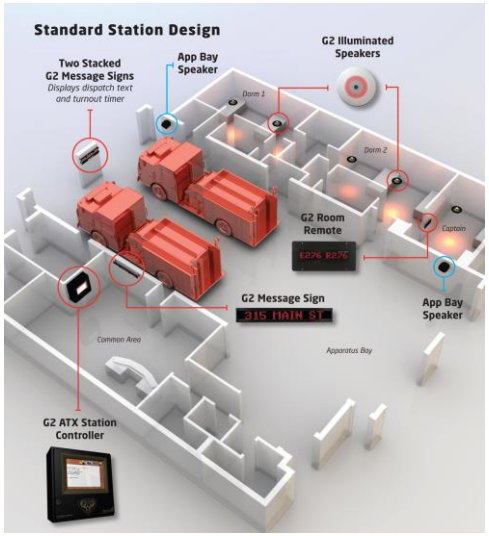
Station Design The Processes (Cont.)







Station Design Safety

Station Design Safety (Cont.)

Station Design Safety (Cont.)

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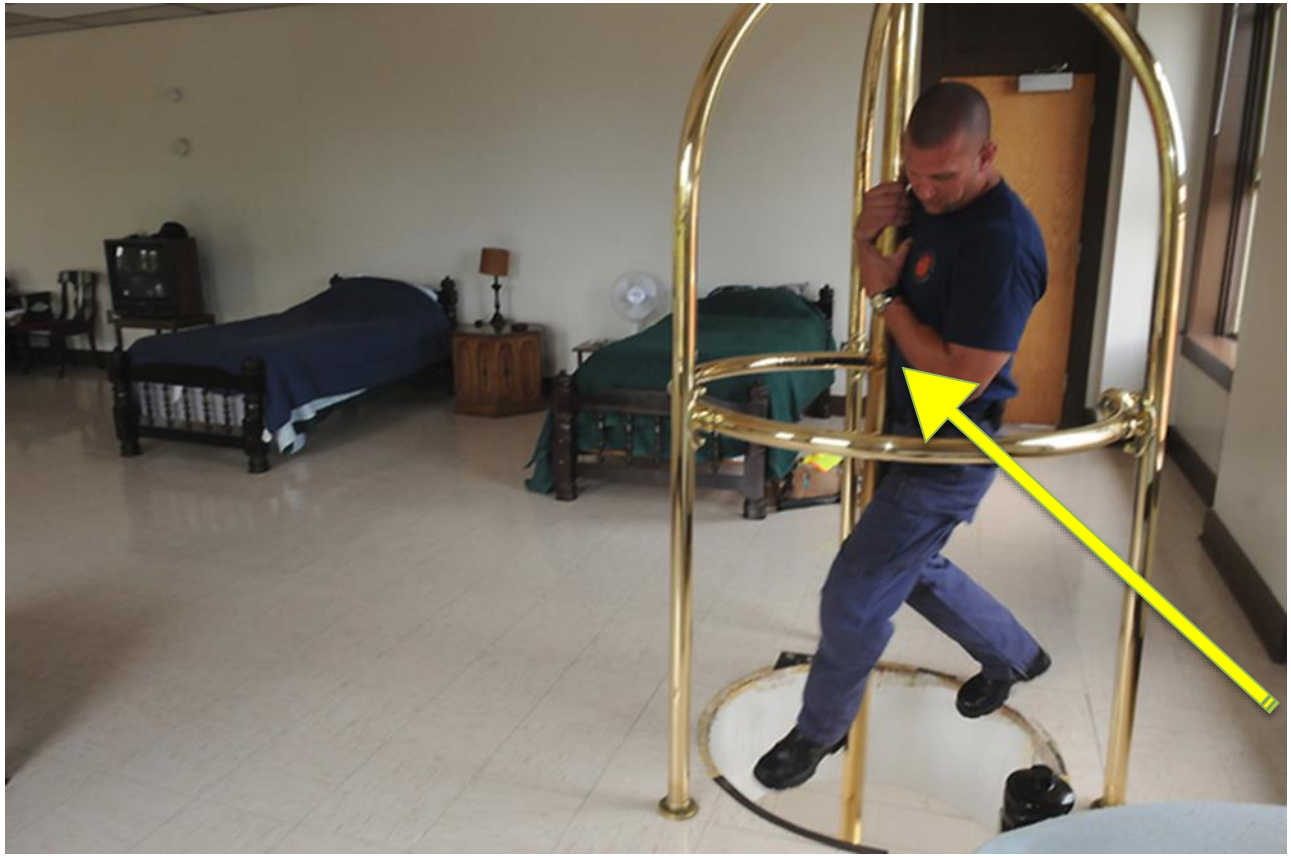

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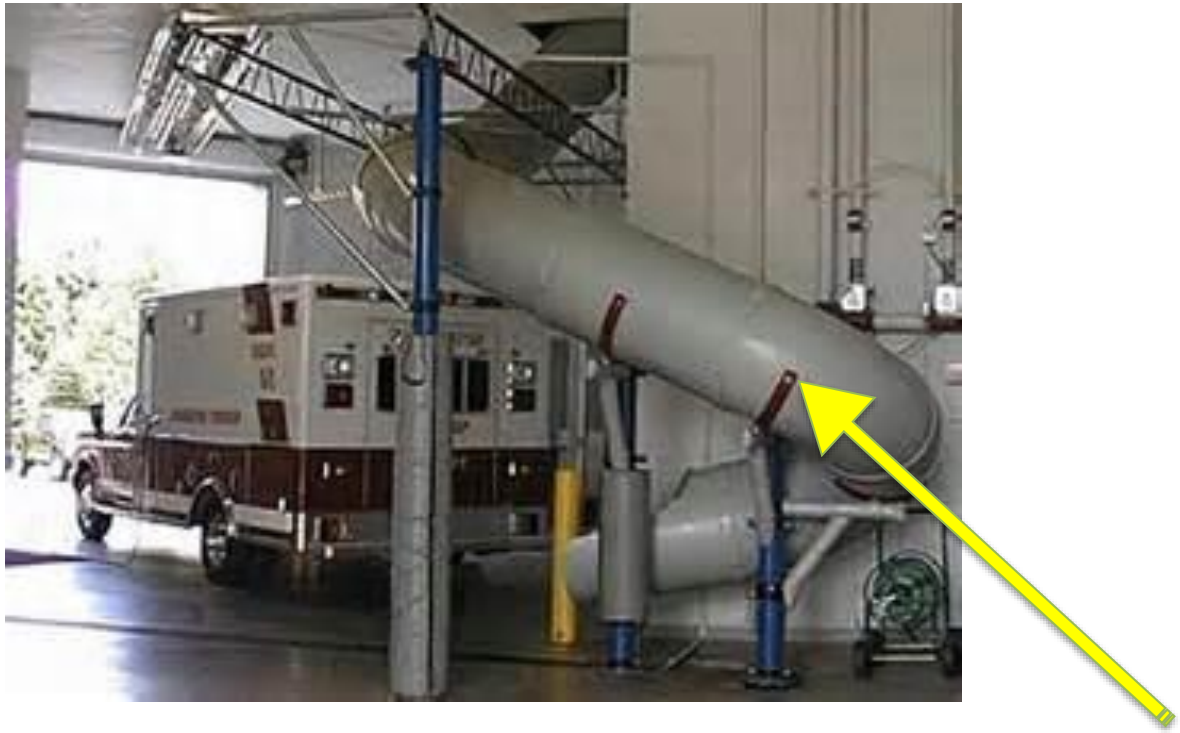
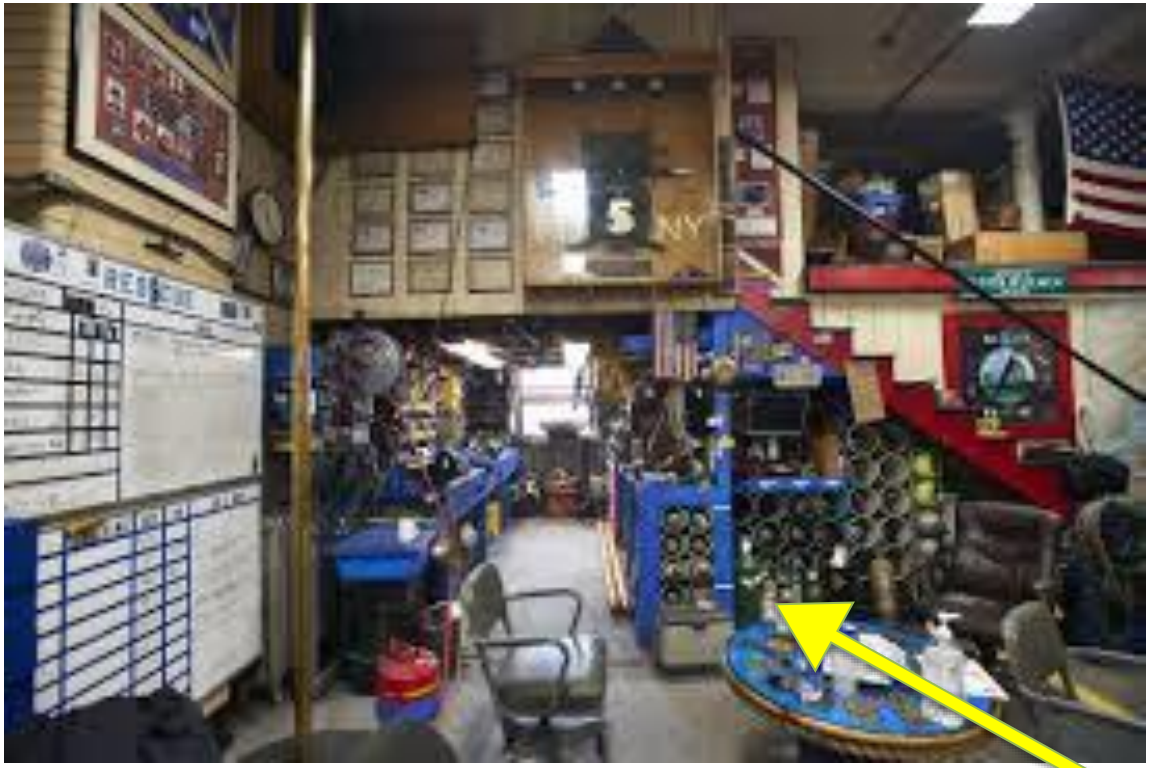


Station Design Safety (Cont.)



Purchasing Law

Risk Management/Safety Programs –Secession III

Objectives

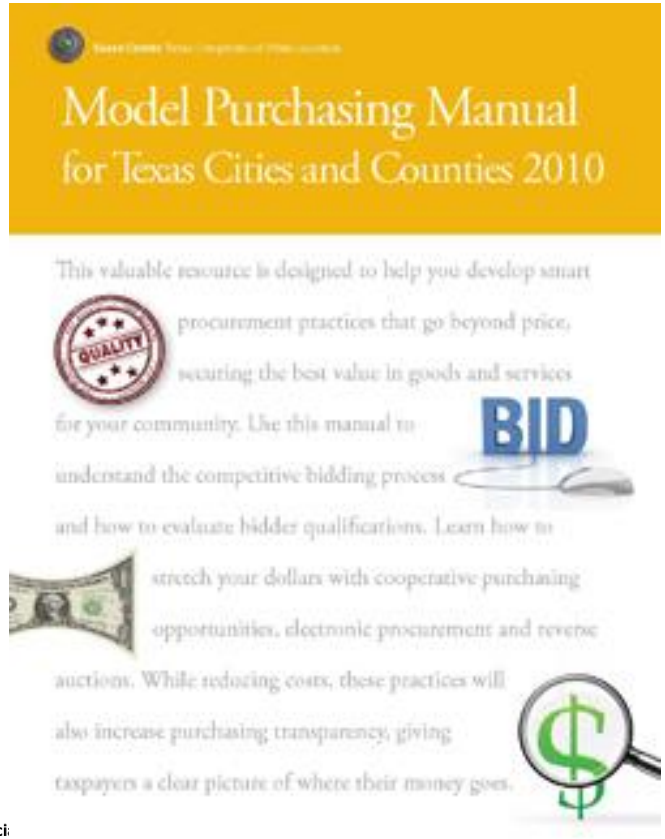
To review Purchasing requirements for governmental subdivisions in Texas.

To review Best Practices for purchasing for other entities in Texas.

To review Cooperative Purchasing Opportunities in Texas.

Texas State Purchasing

- [Current Law]
- [Texas Purchasing Rules Simplified]
- [TCPA Model Purchasing Manual]



Texas COOP Purchasing

- Texas Cooperative Purchasing Manual
- Texas Cooperative Purchasing Program
- HGAC
- Buy-Board
- **Others**
  - County Coops
  - COG's
  - Associations
  - Multiple Entity Programs

Highway Safety

Risk Management/Safety Programs –Session III

Safe Highways Application and Reporting Program

SHRP2

- VFIS - Highway Safety
- TEEX – Safe Practices For Traffic Incident Responders

- **Mandated**
  - SFFMA – certification
  - TCFP
- **Purpose**

  The National Highway Traffic Safety Administration (NHTSA) is one of 11 agencies within the Department of Transportation and is responsible for reducing deaths, injuries and economic losses resulting from motor vehicle crashes.

SHRP2 (Cont.)

- Federal guideline for all traffic control nationwide
- It also covers all “workers” on all streets, roadways, or highways
- This course addresses what is required to adhere to (Manual on Uniform Traffic Control Devices) TMUTCD standards

SHRP2 (Cont.)

- **The three factors most frequently reported as contributing to emergency service personnel's death were:**
  - Lack of visibility of the victim,
  - Distractions, and
  - Blinding caused by emergency vehicles at the incident.
- **TMUTCD vs NFPA**
  - Texas - Responders….should initiate procedures to have the appropriate temporary traffic controls setup."
  - NFPA - "The first arriving unit *shall* ensure that traffic is controlled before addressing emergency operations."

SHRP2 (Cont.)

- **Scope**
  - Responder Safety
    - Incident Notification
    - Incident Blockage
    - Closure of Roadway/Highway by Firefighter
  - Quick Clearance Reduces Secondary Crashes
    - Three types of work durations :
      - Minor (less than 30 minutes)
      - Intermediate (30 minutes - 2 hours)
      - Major (more than 2 hours)
    - Moving Drivable Vehicles off Freeways
    - Cargo Removal
    - Debris Removal
  - Prompt, reliable, interoperable communications.

Conclusion

- Create Awareness
- Improve Safety
- Reduce Your Risk

Hazardous Materials

Risk Management/Safety Programs –Session III

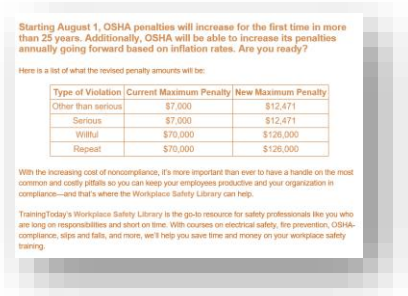
Hazard Materials Federal Regs.

Federal Regulations

- **1910.120**
  - Scope - Emergency response operations for releases of, or substantial threats of releases of, hazardous substances without regard to the location of the hazard.
  - Definitions –
    - Emergency response or responding to emergencies means a response effort by employees from outside the immediate release area or by other designated responders (i.e., mutual aid groups, local fire departments, etc.) to an occurrence which results, or is likely to result, in an uncontrolled release of a hazardous substance. Responses to incidental releases of hazardous substances where the substance can be absorbed, neutralized, or otherwise controlled at the time of release by employees in the immediate release area, or by maintenance personnel are not considered to be emergency responses within the scope of this standard. Responses to releases of hazardous substances where there is no potential safety or health hazard (i.e., fire, explosion, or chemical exposure) are not considered to be emergency responses.

Hazard Materials Federal Regs. (Cont.)

- Emergency response organizations may use the **local emergency response plan** or **the state emergency response plan** or both, as part of their emergency response plan to avoid duplication. Those items of the emergency response plan that are being properly addressed by the SARA Title III plans may be substituted into their emergency plan or otherwise kept together for the employer and employee's use.
- The senior emergency response official responding to an emergency **shall** become the individual in charge of a site-specific **Incident Command System (ICS)**. All emergency responders and their communications shall be coordinated and controlled through the individual in charge of the ICS assisted by the senior official present for each employer. **OSHA Requirement**
- The individual in charge of the ICS **shall designate a safety officer**, who is knowledgeable in the operations being implemented at the emergency response site, with specific responsibility to identify and evaluate hazards and to provide direction with respect to the safety of operations for the emergency at hand. **OSHA Requirement**


Starting August 1, OSHA penalties will increase for the first time in more than 25 years. Additionally, OSHA will be able to increase its penalties annually going forward based on inflation rates. Are you ready?

Here is a list of what the revised penalty amounts will be:

Type of Violation	Current Maximum Penalty	New Maximum Penalty
Other than serious	$7,000	$12,471
Serious	$7,000	$12,471
Willful	$70,000	$126,000
Repeat	$70,000	$126,000

With the increasing cost of noncompliance, it's more important than ever to have a handle on the most common and costly pitfalls so you can keep your employees productive and your organization in compliance—and that's where the Workplace Safety Library can help.

TrainingToday's Workplace Safety Library is the go-to resource for safety professionals like you who are long on responsibilities and short on time. With courses on electrical safety, fire prevention, OSHA-compliance, slips and falls, and more, we'll help you save time and money on your workplace safety training.

Department of Transportation (DOT)

OSHA 1910.120(q) and EPA 311 apply to employers whose employees are engaged in emergency response to hazardous materials incidents. Employer responsibilities under these regulations fall into four primary areas:

- Development of an emergency response plan
- Development of specific procedures for handling hazardous materials incidents
- Training requirements
- Health and safety requirements (medical monitoring for the use of chemical protective clothing and exposure records)

- **First Responder Awareness Level - No Hour Requirement**
  - An understanding of what hazardous materials are and the associated risks
  - An understanding of potential outcomes when hazardous materials are present
  - The ability to recognize the presence of hazardous materials
  - An understanding of the first responder's role and use of the North American Emergency Response Guidebook
  - The ability to recognize the need for additional resources and the knowledge of the procedures to make the appropriate notifications

Department of Transportation (DOT) (Cont.)

- **First Responder Operations Level - OSHA minimum requirement = awareness + 8 hours at operations level**
  - Know basic hazard and risk assessment
  - Know how to select and use protective equipment provided to the first responder
  - Understand basic hazardous materials terms.
  - Know how to perform basic control, containment, and/or confinement operations within the capabilities of their resources and protective equipment
  - Know basic decontamination procedures
  - Understand relevant SOP's and termination procedure

Department of Transportation (DOT) (Cont.)

- **Hazardous Materials Technician - OSHA minimum requirement = 24 hours at operations level + technician training**
  - Know how to implement the employer's emergency response plan
  - Know how to identify materials by using field survey instruments
  - Be able to function in an assigned role in the incident command system
  - Know how to select and use specialized personal protective equipment
  - Understand hazard and risk assessment techniques
  - Be able to perform advanced control and containment operations within the resources and equipment available.
  - Understand and implement decontamination procedures

Department of Transportation (DOT) (Cont.)

- **On Scene Incident Commander - OSHA minimum requirement = 24 hours at operations level + incident commander training**
  - Are able to implement the employer's incident command system
  - Are able to implement the employer's emergency response plan
  - Understand the risks associated with working in chemical protective clothing
  - Know how to implement the local emergency response plan
  - Know of the State emergency response plan and the Federal regional response team
  - Understand the importance of decontamination
- **Safety Officer at Hazardous Materials Incidents and Hazardous Materials Branch Safety Officer**
  - Identify and evaluate hazards, and assist in developing a safe response plan
  - Identify and evaluate unsafe operations, activities, and/or conditions
  - Identify appropriate interventions and coordinate with incident commander

Department of Transportation (DOT) (Cont.)

- **Terrorist Incident Response Training Guidelines:**
  - More Detailed / Recommended Training Objectives

First Responder at Awareness Level			
Audience	Prerequisites	Training	Refresher

Very broad. All who may first respond to hazmat incidents.	None	• No length required; 4-16 hours is common practice
		• Traditional classroom format.
		• Competencies:
		  • Understanding of hazmat and the role of first responder.
		  • Ability to recognize and identify hazmat.
			Very broad. All who may first respond to hazmat incidents.

Department of Transportation (DOT) (Cont.)

- **Terrorist Incident Response Training Guidelines: (Cont.)**
  - More Detailed / Recommended Training Objectives

First Responder at the Operations Level			
Audience	Prerequisites	Training	Refresher
Broad. All who may participate in initial operations at a hazmat incident	First Responder Awareness training.	• 8-40 hours (minimum 8 required). • Classroom and simulator/field instruction. • Competencies: • Understanding of hazmat terms, basic hazard and risk assessment, and role of first responder at operational level. • Ability to perform basic control, containment and/or confinement techniques with proper use or personal protective equipment and following standard operating procedure. • Ability to implement basic decontamination procedures.	1. Competency retesting of all response skills. 2. Technical information updates. 3. Incident scene decision-making using simulated emergencies.

Department of Transportation (DOT) (Cont.)

- **Terrorist Incident Response Training Guidelines: (Cont.)**
  - More Detailed / Recommended Training Objectives

Hazardous Materials Technician			
Audience	Prerequisites	Training	Refresher

Narrow. Prospective hazardous materials team members and others who are designated in response plans as a general resource to perform advanced defensive/offensive operations at all anticipated hazardous materials emergencies.	1. First Responder Awareness training.
	2. First Responder Operations training (min. 24 hours required).
		• 40-240 hours.
		• Classroom and simulator/field instruction, with emphasis on hands-on training.
		• Competencies:
		  • Knowledge of role of technician within incident command system and responsibilities within employer's emergency response plan.
		  • Knowledge of hazardous materials terminology, behavior, and ability to perform advanced hazard and risk assessment using field survey instruments and equipment.
		  • Ability to perform advanced control, containment and/or confinement techniques.- Ability to select and use specialized personal protective equipment.
		  • Ability to implement decontamination procedures.
		  • Knowledge of termination procedures.
			1. Competency retesting of all response skills.
			2. Technical information updates.
			3. Incident scene decision-making using simulated emergencies.

Department of Transportation (DOT) (Cont.)

- **Terrorist Incident Response Training Guidelines: (Cont.)**
  - More Detailed / Recommended Training Objectives
  - Incident Commander - OSHA requirement=24 hours Operations training + Incident Commander training

Audience	Prerequisites	Training	Refresher
Moderate in size. Responders whose level of command responsibility may include incident commander at all phases of a hazmat incident, from initial response through stabilization to incident termination.	1. First Responder Awareness training. 2. First Responder Operations training (min. 24 hours required).	- 16-40 hours. - Classroom and simulator/field instruction, with emphasis on incident management and resource coordination. - Competencies: - Knowledge of role of incident commander within incident command system andrespon-sibilities within employer's emergency response plan. - Knowledge of State and federal emergency response plans. - Ability to manage and coordinate a hazmat incident response, including supervising hazard and risk assessment, coordinating control, containment and confinement operations, ensuring proper use of personal protective equipment, employing proper notification procedures, and ensuring correct decontamination procedures. - Ability to implement transfer of command and incident termination procedures.	1. Review of command structure SOP's. 2. Information updates on State and federal response plans. 3. Refresher practice incident scene manage ment, coordina-tion and decision-making using simulated emergencies.

Department of Transportation (DOT) (Cont.)

- **Terrorist Incident Response Training Guidelines: (Cont.)**
  - More Detailed / Recommended Training Objectives
  - Safety Officer at Hazardous Materials Incidents (OSHA) and Hazardous Materials Branch Safety Officer (NFPA)

Audience	Prerequisites	Training	Refresher
Small in number.		-No specific length of training is recommended or commonly in use. Length of training should be sufficient to allow students to achieve competency. -Classroom, lab, and field exercise formats recommended, with an emphasis on real time field simulations requiring practice in developing safe response plans and identifying safety problems during the implementation of the response plan. -Competencies: - Analyzing the incident. - Assisting in developing a safe response plan. - Assisting in implementing the response plan safely. - Evaluating the response for safety problems	1. Technical information updates. 2. Using simulated emergencies, refreshing of ability to analyze incident and develop safe response plans. 3. Using simulated emergencies, refreshing of ability to evaluate the response and identify safety problems and needed interventions.
Safety Officer (OSHA) Responders at the inc. comm. level with potential for assignment as incident safety officer .	Prior training and demonstrated competency at the awareness, operational, and inc. comm. levels.		
Branch Safety Officer (NFPA) Responders at the technician level with potential for assignment at the haz mat branch safety officer level.	Prior training and demonstrated competency at the awareness, operational, and technician levels.		

Conclusion

Training should provide a working knowledge of the benefits and limitations of **various protection strategies, including evacuation, in-place protection, and a combination thereof**. Participants should gain an understanding of the need for protective action planning and important planning considerations. They should develop the ability to **implement a decision-making process for any given hazardous materials emergency or terrorist incident situation and respective protective action options**, and **learn strategies and techniques for communicating the desired protection action to the general public to elicit the best possible response**.

Response to Violent Incidents

Risk Management/Safety Programs –Session III

Response to Violent Incidents

Achieve Readiness Levels

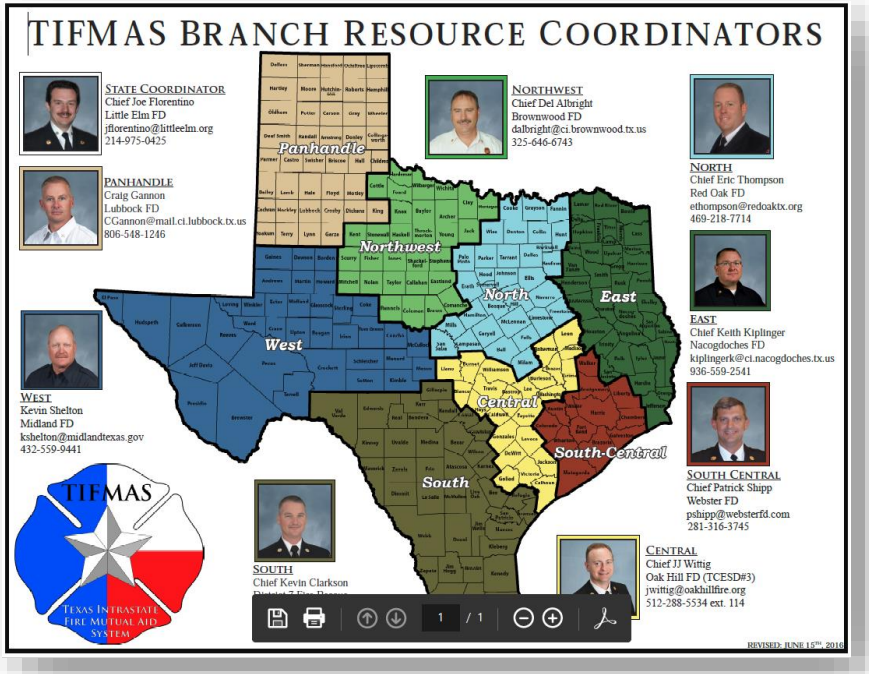
- Assign this responsibility to one or more department members who are:
  - Knowledgeable
  - Communicates effectively with other disciplines
- Consider Partnering
- Demonstrate commitment, set timelines
- Assess your Readiness
- Improve readiness
- Keep all materials to checklist

TIFMAS /AHIMTs

Risk Management/Safety Programs –Session III

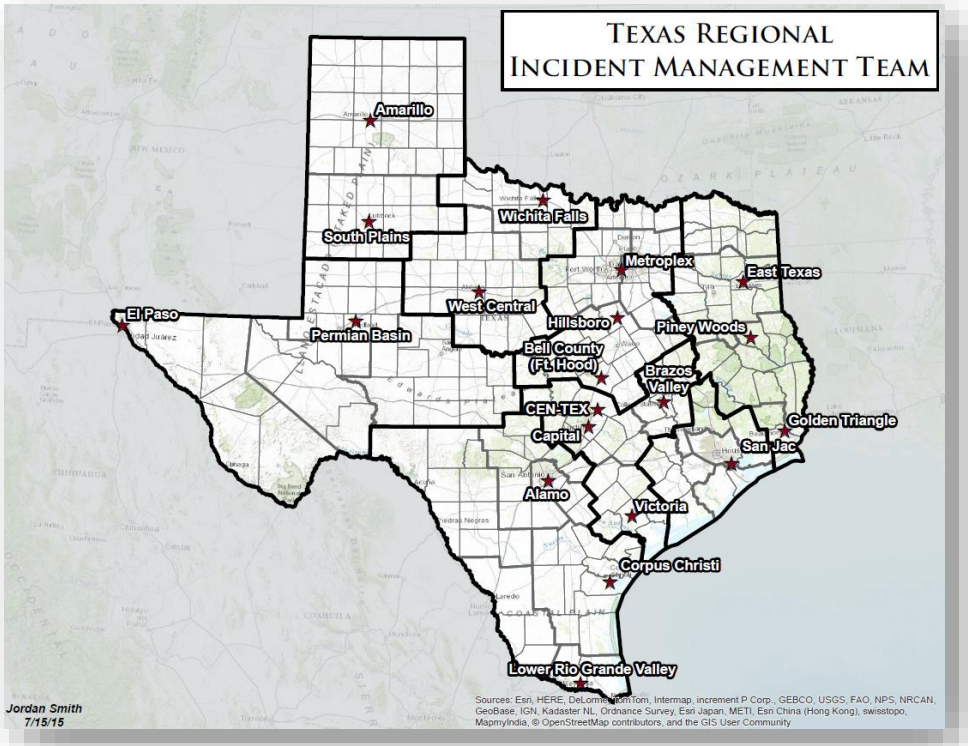
TIFMAS /AHIMTS

- **Texas Intrastate Fire Mutual Aid System (TIFMAS) – Annex F – tifmas.org**
  - Maintained by Texas A&M Forest Service.
    - Includes grants, training, qualifications and mobilization systems to make statewide use of local resources.



AHIMTs

- **Texas All Hazard Incident Management Team (AHIMT) – Master Plan**
  - To provide qualified Type 3 All-Hazards Incident Management Teams (AHIMT) for the State of Texas and its political subdivisions capable of **supporting and assisting** in the management of **natural and manmade emergencies**, disasters, and acts of terrorism.

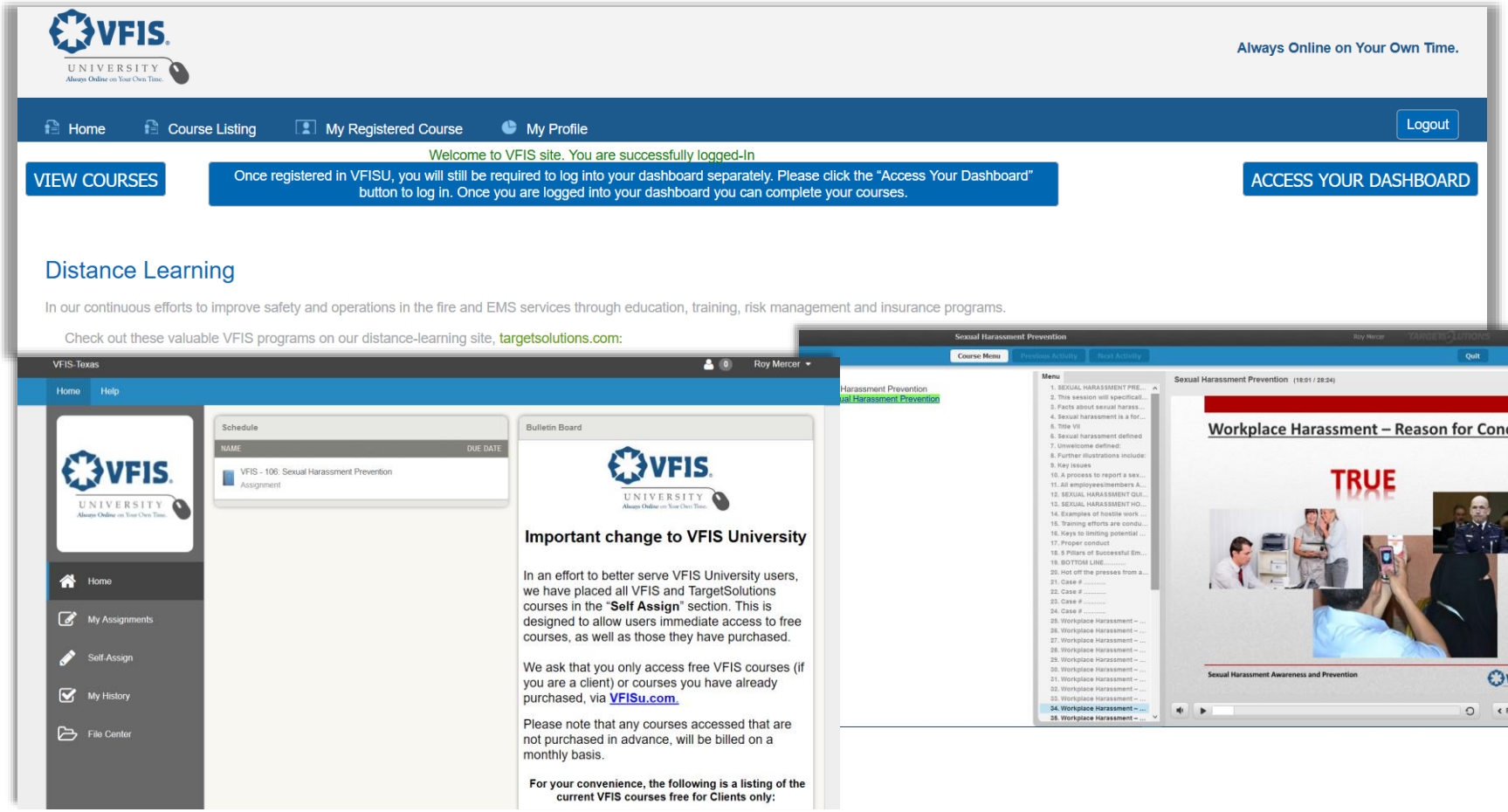


Resources

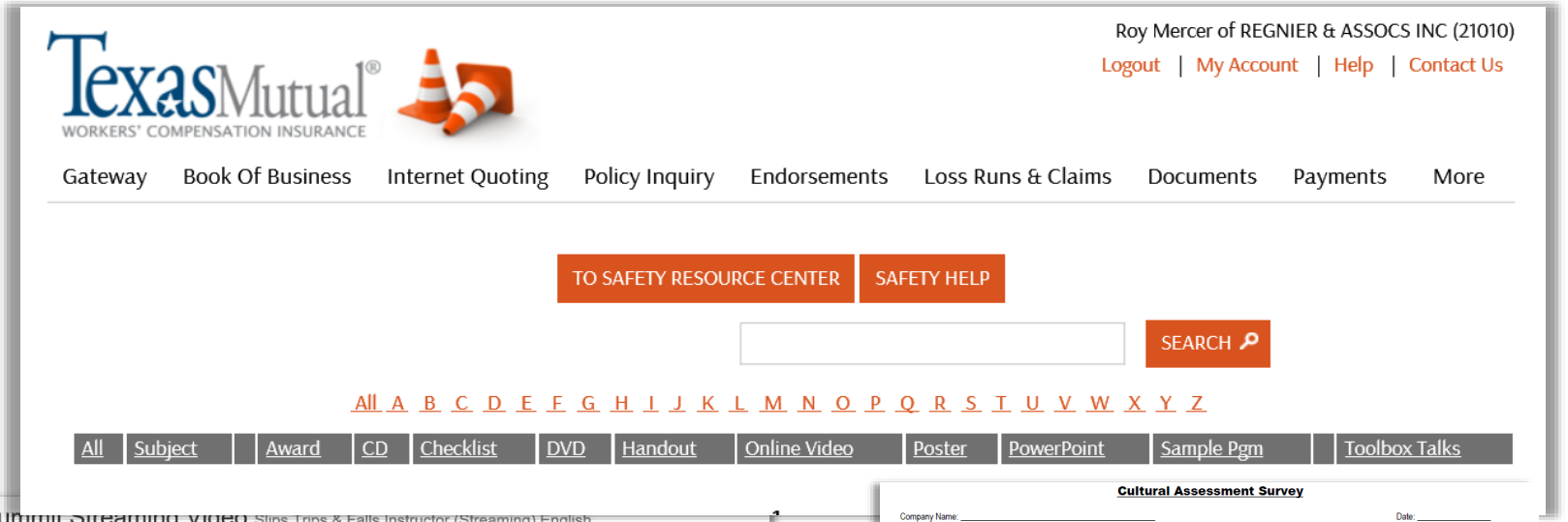
Risk Management/Safety Programs –Session III

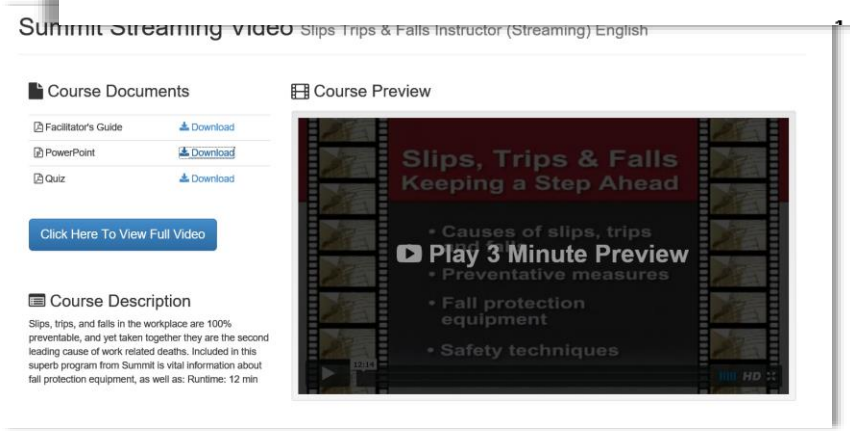
Resources (VFIS HR Help)

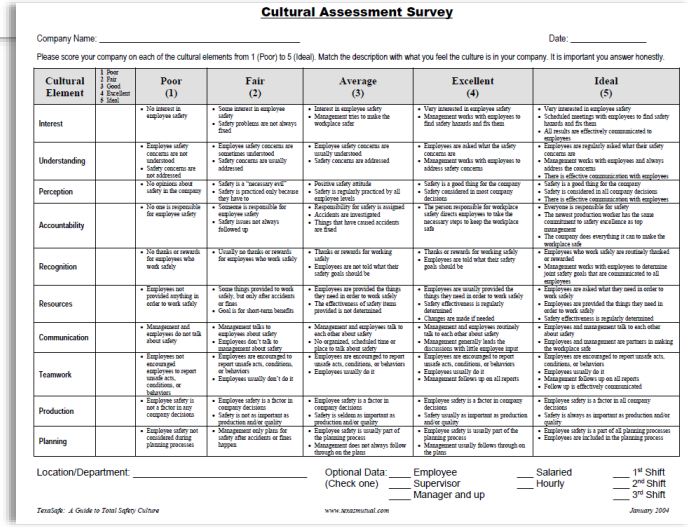
Resources (VFIS University)



Resources (Texas Mutual)







Cultural Assessment Survey

Company Name: _____ Date: _____

Please score your company on each of the cultural elements from 1 (Poor) to 5 (Ideal). Match the description with what you feel the culture is in your company. It is important you answer honestly.

Cultural Element	1 Poor 2 Fair 3 Good 4 Excellent 5 Ideal	Poor (1)	Fair (2)	Average (3)	Excellent (4)	Ideal (5)
Interest		• No interest in employee safety	• Some interest in employee safety • Safety problems are not always fixed	• Interest in employee safety • Management tries to make the workplace safe	• Very interested in employee safety • Management works with employees to find safety hazards and fix them	• Very interested in employee safety • Scheduled meetings with employees to find safety hazards and fix them • All results are effectively communicated to employees
Understanding		• Employee safety concerns are not understood • Safety concerns are not addressed	• Employee safety concerns are sometimes understood • Safety concerns are usually addressed	• Employee safety concerns are usually understood • Safety concerns are addressed	• Employees are asked what the safety concerns are • Management works with employees to address safety concerns	• Employees are regularly asked what their safety concerns are • Management works with employees and always address the concerns • There is effective communication with employees
Perception		• No opinions about safety in the company	• Safety is a "necessary evil" • Safety is practiced only because they have to	• Positive safety attitude • Safety is regularly practiced by all employee levels	• Safety is a good thing for the company • Safety considered in most company decisions	• Safety is a good thing for the company • Safety is considered in all company decisions • There is effective communication with employees
Accountability		• No one is responsible for employees safety	• Someone is responsible for employees safety • Safety issues not always followed up	• Responsibility for safety is assigned • Accidents are investigated • Things that have caused accidents are fixed	• The person responsible for workplace safety directs employees to take the necessary steps to keep the workplace safe	• Everyone is responsible for safety • The newest production worker has the same commitment to safety excellence as top management • The company does everything it can to make the workplace safe
Recognition		• No thanks or rewards for employees who work safely	• Usually no thanks or rewards for employees who work safely	• Thanks or rewards for working safely • Employees are not told what their safety goals should be	• Thanks or rewards for working safely • Employees are told what their safety goals should be	• Employees who work safely are routinely thanked or rewarded • Management works with employees to determine joint safety goals that are communicated to all employees
Resources		• Employees not provided anything in order to work safely	• Some things provided to work safely, but only after accidents or fines • Goal is for short-term benefits	• Employees are provided the things they need in order to work safely • The effectiveness of safety items provided is not determined	• Employees are usually provided the things they need in order to work safely • Safety effectiveness is regularly determined • Changes are made if needed	• Employees are asked what they need in order to work safely • Employees are provided the things they need in order to work safely • Safety effectiveness is regularly determined
Communication		• Management and employees do not talk about safety	• Management talks to employees about safety • Employees don't talk to management about safety	• Management and employees talk to each other about safety • No organized, scheduled time or place to talk about safety	• Management and employees routinely talk to each other about safety • Management generally leads the discussions with little employee input	• Employees and management talk to each other about safety • Employees and management are partners in making the workplace safe
Teamwork		• Employees not encouraged employees to report unsafe acts, conditions, or behaviors	• Employees are encouraged to report unsafe acts, conditions, or behaviors • Employees usually don't do it	• Employees are encouraged to report unsafe acts, conditions, or behaviors • Employees usually do it	• Employees are encouraged to report unsafe acts, conditions, or behaviors • Employees usually do it • Management follows up on all reports	• Employees are encouraged to report unsafe acts, conditions, or behaviors • Employees usually do it • Management follows up on all reports • Follow up is effectively communicated
Production		• Employee safety is not a factor in my company decisions	• Employee safety is a factor in company decisions • Safety is not as important as production and/or quality	• Employee safety is a factor in company decisions • Safety is seldom as important as production and/or quality	• Employee safety is a factor in company decisions • Safety usually as important as production and/or quality	• Employee safety is a factor in all company decisions • Safety is always as important as production and/or quality
Planning		• Employee safety not considered during planning processes	• Management only plans for safety after accidents or fines happen	• Employee safety is usually part of the planning process • Management does not always follow through on the plans	• Employee safety is usually part of the planning process • Management usually follows through on the plans	• Employee safety is a part of all planning processes • Employees are included in the planning process

Location/Department: _____

Optional Data: (Check one) ___ Employee ___ Supervisor ___ Manager and up ___ Salaried ___ Hourly ___ 1st Shift ___ 2nd Shift ___ 3rd Shift

TexaSafe: A Guide to Total Safety Culture www.texasmutual.com January 2004

Resources (Texas Mutual Toolbox)

TexasMutual®
WORKERS' COMPENSATION INSURANCE
WORK SAFE, TEXAS.™

[TOOLBOX TALKS]

Get Free Safety Topics Delivered to Your Inbox

Toolbox Talks streamline your safety meetings

Training is a core element of any solid safety program. Texas Mutual's free Toolbox Talks help you streamline your safety training and engage your employees in the message.

Each single-topic Toolbox Talk is:

Free. Toolbox Talks are a benefit of your Texas Mutual coverage.

Convenient. Once a month, we'll send a new Toolbox Talk to your inbox.

Short. Supervisors can hold safety meetings in as little as five minutes.

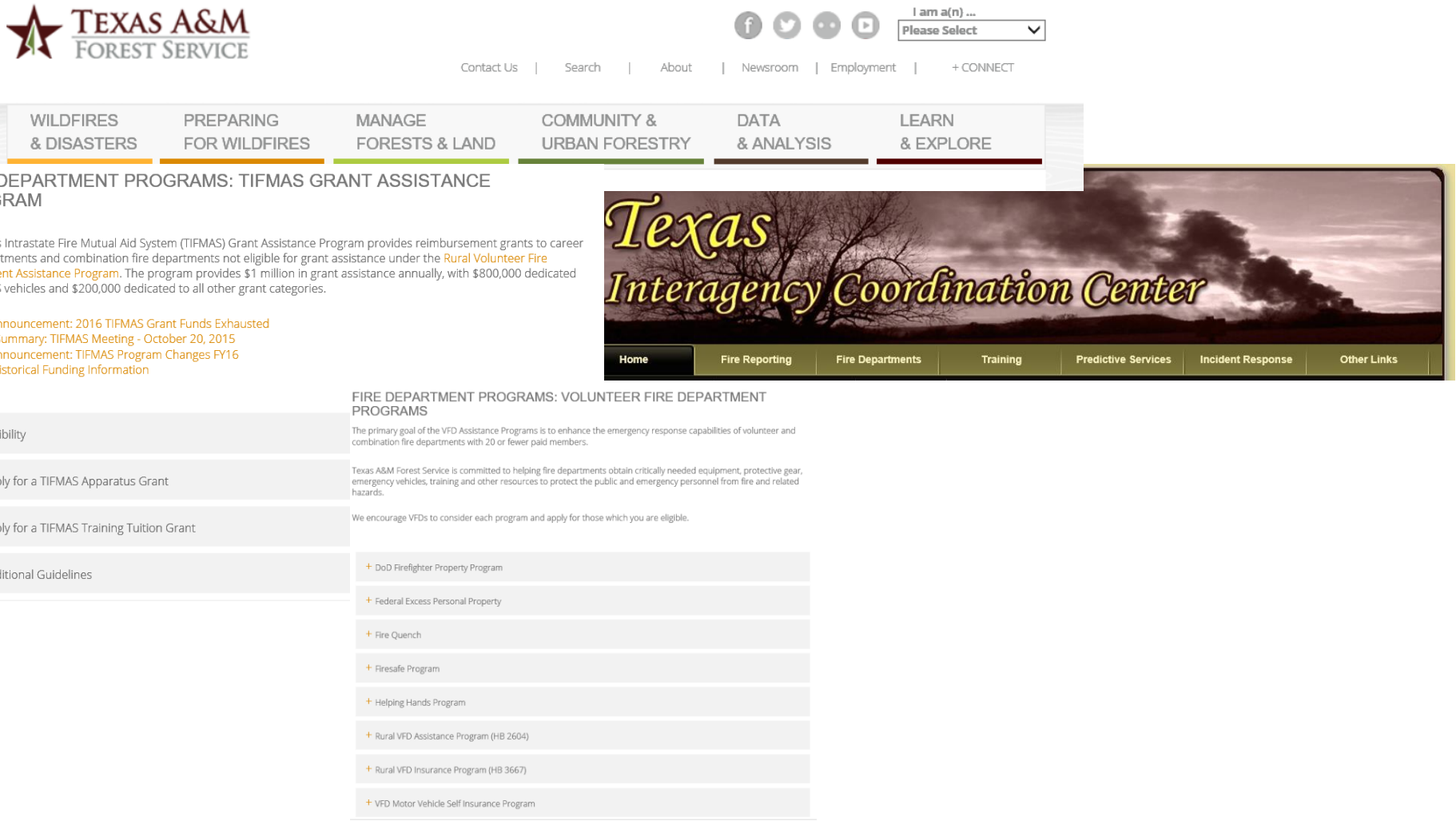
Multipurpose. Each one-page Toolbox Talk includes a short safety message and discussion questions.

Interested?

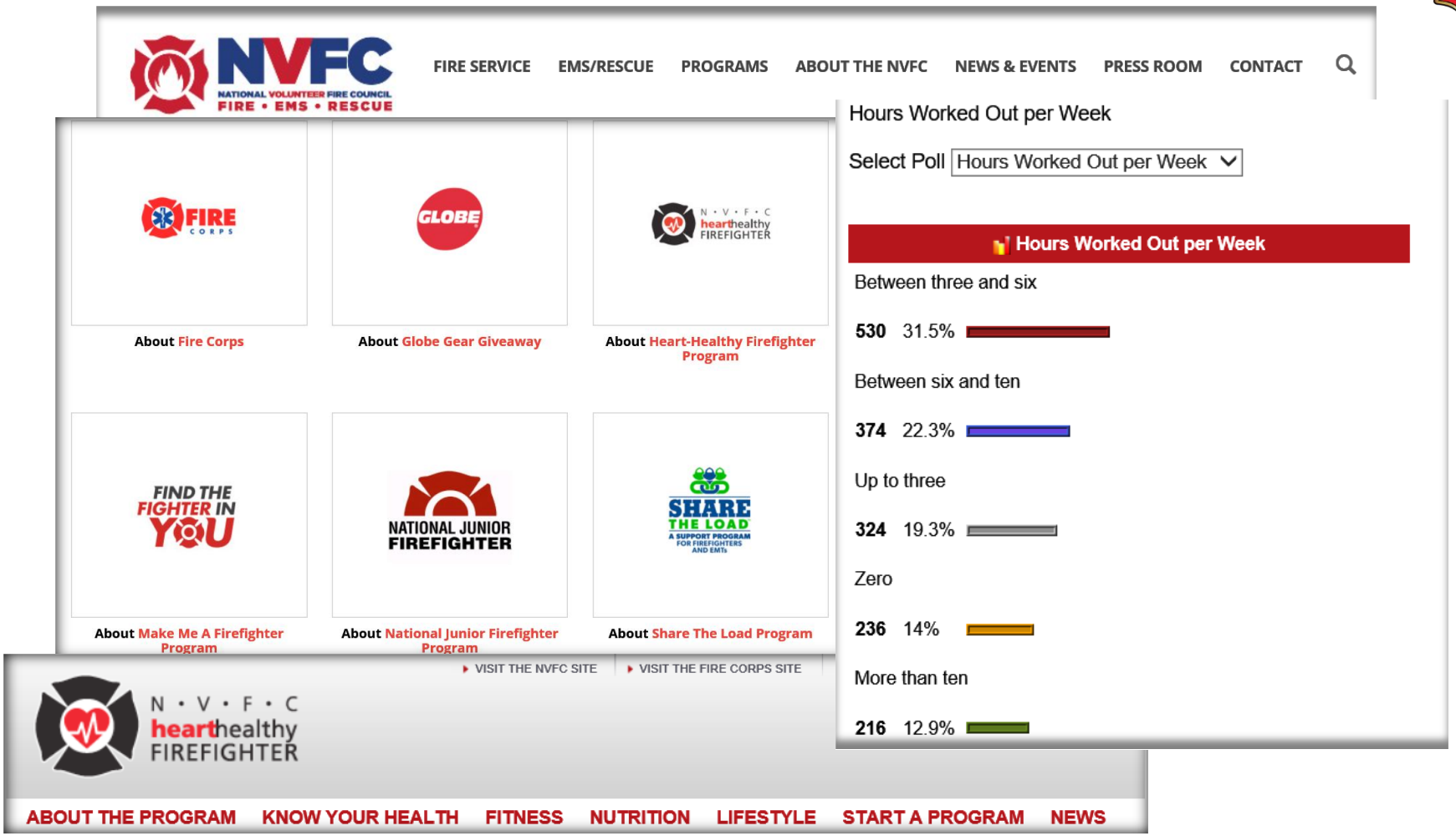
Send an email to safety@texasmutual.com with Toolbox Talks in the subject line. In the body of your email, give us the following information:

- Company name
- Policy number
- Person to receive the monthly topic
- Email address

Resources (Texas Forest Service)



Resources (NVFC)



Resources (Texas Best Practices)

12 Areas of Concentration

Administration and Organization - Emergency Medical Service
Training - Special Operations - Records and Information Management
Fire Operations - Fire Prevention, Risk Reduction, Community Outreach
Response Analysis - Communications - Safety and Health
Resources Management - Professional Standards and Conduct

Recognition Program Annual Fees

Recognition program annual fees depend on the size of department as listed below:

Fire Fighters	Fee Amount
1-10	$ 350.00
11-25	$ 500.00
26-50	$1,200.00
51-100	$1,600.00
101-200	$2,000.00
201 or more	$2,400.00

For more information view this website or contact
Betty Wilkes, Executive Director, Texas Fire Chiefs Association
P.O. Box 66700, Austin, Texas 78766 or 512.294.7423 or bwilkes@texasfirechiefs.org

Resources (IAFC)

IAFC
INTERNATIONAL ASSOCIATION OF FIRE CHIEFS

A | A | A BOOKMARK Search Go

For: Company Officers | Corporate Partners | Government | Media

About IAFC | Government Relations | Education & Development | Programs & Initiatives | Operations Resources | Administration Resources | IAFC Committees | IAFC Divisions | IAFC Sections

Programs & Initiatives

The IAFC leads a variety of programs that directly impact our members' roles as leaders. We provide tools and resources that fortify response, support education and prevention, enhance training, and strengthen efforts to improve responder health and safety. The IAFC actively works with members, stakeholders and community partners to deliver high-quality programs.

Use the links on the left for program details or go to summary information of all IAFC programs.

Downloadable Tools and Other Resources

Nomination and Eligibility Guidelines - Safety, Health and Survival Section Awards (pdf)

A Fire Department's Guide to Implementing NFPA 1582

Taking Action Against Cancer in the Fire Service (pdf)

Crew Resource Management

Medical Evaluations Task Force Reports and Resources

Rules of Engagement for Structural Firefighting (pdf)

Rules of Engagement for Structural Firefighting - FINAL (pdf)

Review and Assessment of the National League of Cities' *Assessing State Firefighter Cancer Presumption Laws and Current Firefighter Cancer Research* (pdf)
Panel convened by the IAFC's Safety, Health and Survival Section

Fire Service Joint Labor Management Wellness-Fitness Task Force
IAFC/IAFF wellness fitness programs

Fire Service Joint Labor-Management Wellness-Fitness Initiative: 3rd edition (pdf, 2.7 mb)

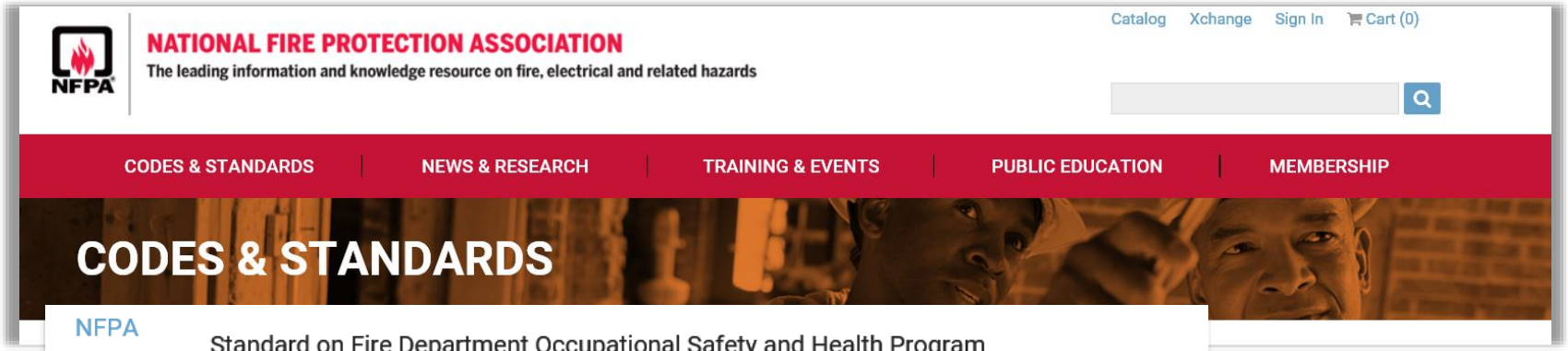
Model Procedures for Response of Emergency Vehicles During Hurricanes and Tropical Storms (pdf)

IAFC's SHS Section recommendation report: *Improvement to NIOSH's Fire Fighter Fatality Investigation and Prevention Program (FFFIPP) with respect to LODD investigations* (pdf)

Sleep Deprivation

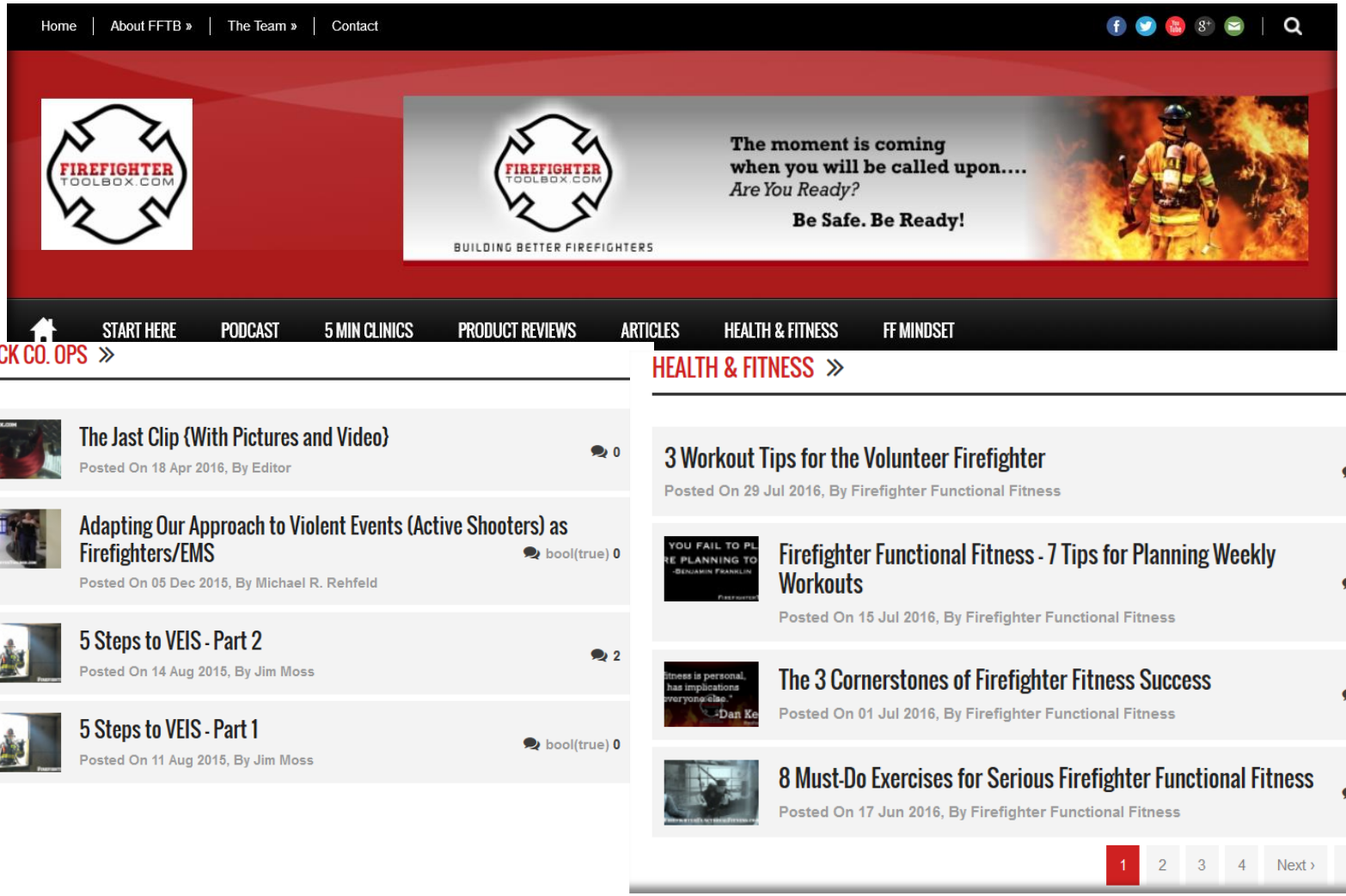
Vehicle Safety

Resources (NFPA)



NFPA 1500	Standard on Fire Department Occupational Safety and Health Program
NFPA 1521	Standard for Fire Department Safety Officer Professional Qualifications
NFPA 1561	Standard on Emergency Services Incident Management System and Command Safety
NFPA 1581	Standard on Fire Department Infection Control Program
NFPA 1582	Standard on Comprehensive Occupational Medical Program for Fire Departments
NFPA 1583	Standard on Health-Related Fitness Programs for Fire Department Members
NFPA 1584	Standard on the Rehabilitation Process for Members During Emergency Operations and Training Exercises

Resources (FF Toolbox)



Development of Standards

Risk Management/Safety Programs – Session III

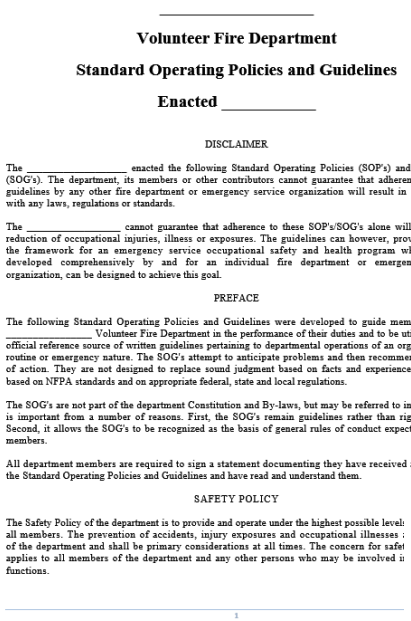
How to Develop a SOP/SOG

- A Standard Operating Procedure (SOP) is a document consisting of step-by-step information on how to execute a task. An existing SOP may need to just be modified and updated.
- Configuring Your Document
  - No formal template - make it simple
  - Make documents consistent – easier to read and to comprehend
  - Consider your audience
  - Consider your knowledge
  - Decide between a short or long-form SOP

- Keep your SOP purpose in mind to:
  - Ensure compliance standards are met
  - Maximize production requirements
  - Ensure the procedure has no adverse impact on environment
  - Ensure safety
  - Ensure everything goes according to schedule
  - Prevent failures in manufacturing
  - Be used as training document

Writing Your SOP/SOG

- Cover the necessary material
  - Title page
    1. the title of the procedure,
    2. an SOP identification number,
    3. date of issue or revision,
    4. the name of the agency/division/branch the SOP applies to, and
    5. the signatures of those who prepared and approved of the SOP.
  - Table of Contents (Consider Length) Quality Assurance/Quality Control - like performance evaluation samples
  - Reference - cite significant references



Volunteer Fire Department

Standard Operating Policies and Guidelines

Enacted _____

DISCLAIMER

The _____ enacted the following Standard Operating Policies (SOP's) and Guidelines (SOG's). The department, its members or other contributors cannot guarantee that adherence to these guidelines by any other fire department or emergency service organization will result in compliance with any laws, regulations or standards.

The _____ cannot guarantee that adherence to these SOP's/SOG's alone will result in a reduction of occupational injuries, illness or exposures. The guidelines can however, provide part of the framework for an emergency service occupational safety and health program which, when developed comprehensively by and for an individual fire department or emergency service organization, can be designed to achieve this goal.

PREFACE

The following Standard Operating Policies and Guidelines were developed to guide members of the _____ Volunteer Fire Department in the performance of their duties and to be utilized as the official reference source of written guidelines pertaining to departmental operations of an organizational, routine or emergency nature. The SOG's attempt to anticipate problems and then recommends courses of action. They are not designed to replace sound judgment based on facts and experiences. They are based on NFPA standards and on appropriate federal, state and local regulations.

The SOG's are not part of the department Constitution and By-laws, but may be referred to in them. This is important from a number of reasons. First, the SOG's remain guidelines rather than rigid policies. Second, it allows the SOG's to be recognized as the basis of general rules of conduct expected from all members.

All department members are required to sign a statement documenting they have received a copy of the Standard Operating Policies and Guidelines and have read and understand them.

SAFETY POLICY

The Safety Policy of the department is to provide and operate under the highest possible level all members. The prevention of accidents, injury exposures and occupational illnesses of the department and shall be primary considerations at all times. The concern for safe applies to all members of the department and any other persons who may be involved i functions.

1

Table of Contents

tion 1 --- Introduction

tion 2 --- Administration Policies

PURPOSE

Presented on the following pages are the Standard Operating Policies and Guidelines of the _____. They are to be used as a reference pertaining to department procedures and regulations and to establish behavioral guidelines. They should promote the effective and efficient operation of the fire department. They are intended to assist members accomplish the mission of the department:

The purpose of the Department shall be the saving of lives and the protection of property endangered by fires
and other disasters, and to promote the teaching and practice of fire prevention and protection.

It must be stressed that under all circumstances, common sense must prevail. Emergency response situations are so varied specific rules and regulations cannot always be followed in the strictest sense and may need to be altered according to the incident. The guidelines should be used as a tool to inform members of the direction their decisions and actions should follow.

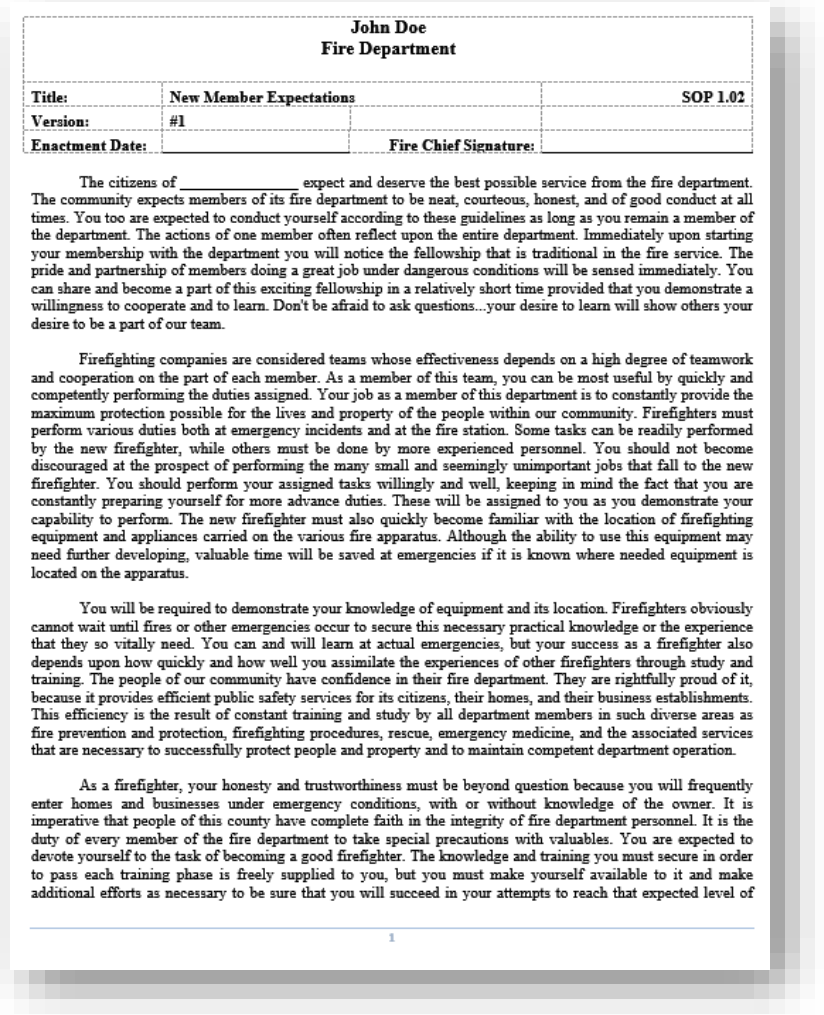
The members of the _____ are a diverse group joined together in a common cause, providing a valued and outstanding service to the community. Keep in mind, every member's personal conduct and behavior reflects on the department as a whole. It takes only one thoughtless, careless or selfish act to destroy the excellent reputation established through many years of dedication and hard work. Each of us is ultimately responsible for our decisions.

Writing Your SOP/SOG (cont.)

- **Procedure itself**
  - Scope and Applicability (Purpose)
  - Methodology and Procedures (Meat)
  - Terminology - Identify acronyms, abbreviations, and all phrases that aren't in common parlance
  - Health and Safety Warnings
  - Equipment and Supplies
- Cautions and Interferences
- Make your writing concise and easy to read
- Get personnel's feedback which the policy/guideline effects
- Break up large chunks of text with diagrams and flowcharts
- Control document notation (ID Numbers)

Writing Your SOP/SOG (cont.)

- **Ensuring Success and Accuracy**
  - Test the Procedure
  - Personnel Review
  - Implementation



John Doe
Fire Department

Title:	**New Member Expectations**	**SOP 1.02**
Version:	**#1**	
Enactment Date:	**Fire Chief Signature:**	

The citizens of _____ expect and deserve the best possible service from the fire department. The community expects members of its fire department to be neat, courteous, honest, and of good conduct at all times. You too are expected to conduct yourself according to these guidelines as long as you remain a member of the department. The actions of one member often reflect upon the entire department. Immediately upon starting your membership with the department you will notice the fellowship that is traditional in the fire service. The pride and partnership of members doing a great job under dangerous conditions will be sensed immediately. You can share and become a part of this exciting fellowship in a relatively short time provided that you demonstrate a willingness to cooperate and to learn. Don't be afraid to ask questions...your desire to learn will show others your desire to be a part of our team.

Firefighting companies are considered teams whose effectiveness depends on a high degree of teamwork and cooperation on the part of each member. As a member of this team, you can be most useful by quickly and competently performing the duties assigned. Your job as a member of this department is to constantly provide the maximum protection possible for the lives and property of the people within our community. Firefighters must perform various duties both at emergency incidents and at the fire station. Some tasks can be readily performed by the new firefighter, while others must be done by more experienced personnel. You should not become discouraged at the prospect of performing the many small and seemingly unimportant jobs that fall to the new firefighter. You should perform your assigned tasks willingly and well, keeping in mind the fact that you are constantly preparing yourself for more advance duties. These will be assigned to you as you demonstrate your capability to perform. The new firefighter must also quickly become familiar with the location of firefighting equipment and appliances carried on the various fire apparatus. Although the ability to use this equipment may need further developing, valuable time will be saved at emergencies if it is known where needed equipment is located on the apparatus.

You will be required to demonstrate your knowledge of equipment and its location. Firefighters obviously cannot wait until fires or other emergencies occur to secure this necessary practical knowledge or the experience that they so vitally need. You can and will learn at actual emergencies, but your success as a firefighter also depends upon how quickly and how well you assimilate the experiences of other firefighters through study and training. The people of our community have confidence in their fire department. They are rightfully proud of it, because it provides efficient public safety services for its citizens, their homes, and their business establishments. This efficiency is the result of constant training and study by all department members in such diverse areas as fire prevention and protection, firefighting procedures, rescue, emergency medicine, and the associated services that are necessary to successfully protect people and property and to maintain competent department operation.

As a firefighter, your honesty and trustworthiness must be beyond question because you will frequently enter homes and businesses under emergency conditions, with or without knowledge of the owner. It is imperative that people of this county have complete faith in the integrity of fire department personnel. It is the duty of every member of the fire department to take special precautions with valuables. You are expected to devote yourself to the task of becoming a good firefighter. The knowledge and training you must secure in order to pass each training phase is freely supplied to you, but you must make yourself available to it and make additional efforts as necessary to be sure that you will succeed in your attempts to reach that expected level of

1

Personal Health and Wellness

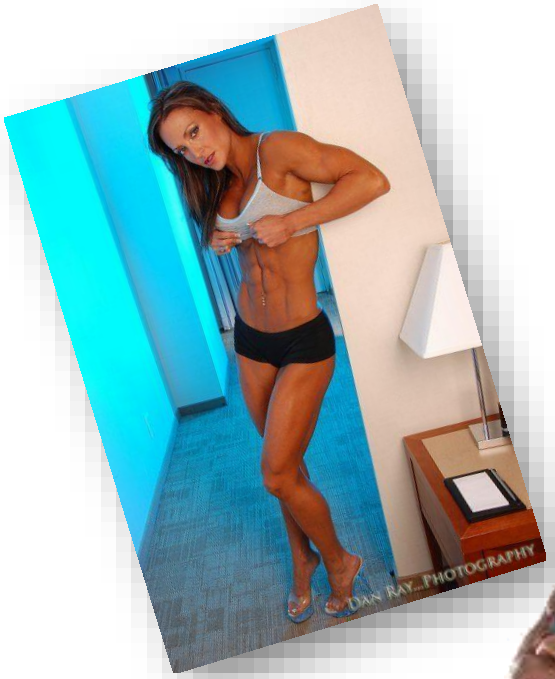
Risk Management/Safety Programs

Today's Focus, YOU

- I will not be telling you to do anything, you have to want it, and you can…
- This is not a professional health class, just some simple ideas to help you improve your life style in small steps
- The number one rule, don't over do it and seek a doctor's input if you have health concerns.
- Simple exercises and Stretching
- Nutrition

Except It!

Is this realistic?



Problems (Diet Plans)

Jenny Craig

Vegetarian Diet

Mediterranean Diet

MIND Diet

Ornish Diet

DASH Diet

Weight Watchers Diet

Volumetrics Diet

Problems (Meal Supplements)

Problem (Exercise Programs)

So

- **Where do I need to go to exercise?**
- **What supplements are best for me?**
- **What nutritional program do I need to adapt too?**
- **What programs are the best for me overall?**

The answer is still simple, YOU!

Meaning:

- Your Life
- Your need
- Your time
- Your Commitment
- Your Family
- Your Job
- Your Fun Time
- Your, Your, Your….

Your Schedule

Schedule

- **First and foremost:**
  - How long
- **Morning – Lunch – Evening**
  - Time driven
  - Feel Your Best
  - Schedule
    - Becoming an early bird

What can I do to live healthy

- **First and Most important:**
  - You have to want it
  - Are you treating the symptoms
- **Small Steps**
  - First Give up something you know is bad, soda, bread, etc.…
  - Exercise – stretching, walking, weight, lifting, push-ups, working in the yard, start a garden, something
  - Drink water
  - If you need it get a partner
  - Do it different – stand instead of sitting
  - Pick up a sport

Foods

Published on Apr 19, 2017

Within hours of eating an unhealthy meal, we can get a spike in inflammation, crippling our artery function, thickening our blood, and causing a fight-or-flight nerve response. But there are foods we can eat at every meal to counter this reaction

What can I do to live healthy (Cont.)

Artificial sweeteners are man-made substitutes for table sugar in food and beverages. Popular artificial sweeteners include: acesulfame K (Sweet One®), aspartame (Equal, NutraSweet®), cyclamate (Sugar Twin®), erythritol (Zsweet®), saccharin (Sweet'N Low®), stevia (Truvía®, Pure Via®), sucralose (Splenda®), xylitol (XyloSweet®) and sorbitol.

Sweeteners:

- Sweet One® - has been associated with various cancers in studies.
- Equal, NutraSweet® - Around 92% of independent studies Adverse health effects reported include: pre-term births, fibromyalgia, hypertension, brain disorders, blood platelet disorders, migraine headaches and
- Truvía®, Pure Via®, - The resulting steviocides in the consumer product are converted into steviol in the gut, which may be toxic and cause mutagenic DNA damage in great enough quantities. .

What can I do to live healthy (Cont.)

Artificial sweeteners are man-made substitutes for table sugar in food and beverages. Popular artificial sweeteners include: acesulfame K (Sweet One®), aspartame (Equal, NutraSweet®), cyclamate (Sugar Twin®), erythritol (Zsweet®), saccharin (Sweet'N Low®), stevia (Truvía®, Pure Via®), sucralose (Splenda®), xylitol (XyloSweet®) and sorbitol.

Sweeteners (cont.):

Zsweet® / XyloSweet® - are used in consumer products like gum, sugar-free candies and toothpaste. Studies show these two sweeteners may draw fluid into the colon in digestion and have a laxative effect.

Studies show a direct relationship between consumption of foods containing artificial sweeteners and weight gain. The reasons for this are: 1) "reverse causation", i.e., the more weight people gain, the more they consume artificial sweeteners to try to offset the weight gain, 2) overcompensation for expected calorie reduction (e.g., having a diet cola with a double cheeseburger) and 3) the appetite-promoting effect of sweet substances on the tongue versus the appetite suppression effect of actual calories in the gut.

What can I do to live healthy (Cont.)

. . . white bread may be associated with increased cancer risk, especially prostate cancer. There are few antioxidants in white bread. Eating white bread also seems to have a negative effect on cognitive function and it appears to increase our insulin level.

On the other hand, unrefined, whole grains have been associated with lower risk of diabetes, heart disease, and cancer. Rye intake may be associated with lower breast and prostate cancer risk.

What can I do to live healthy (Cont.)

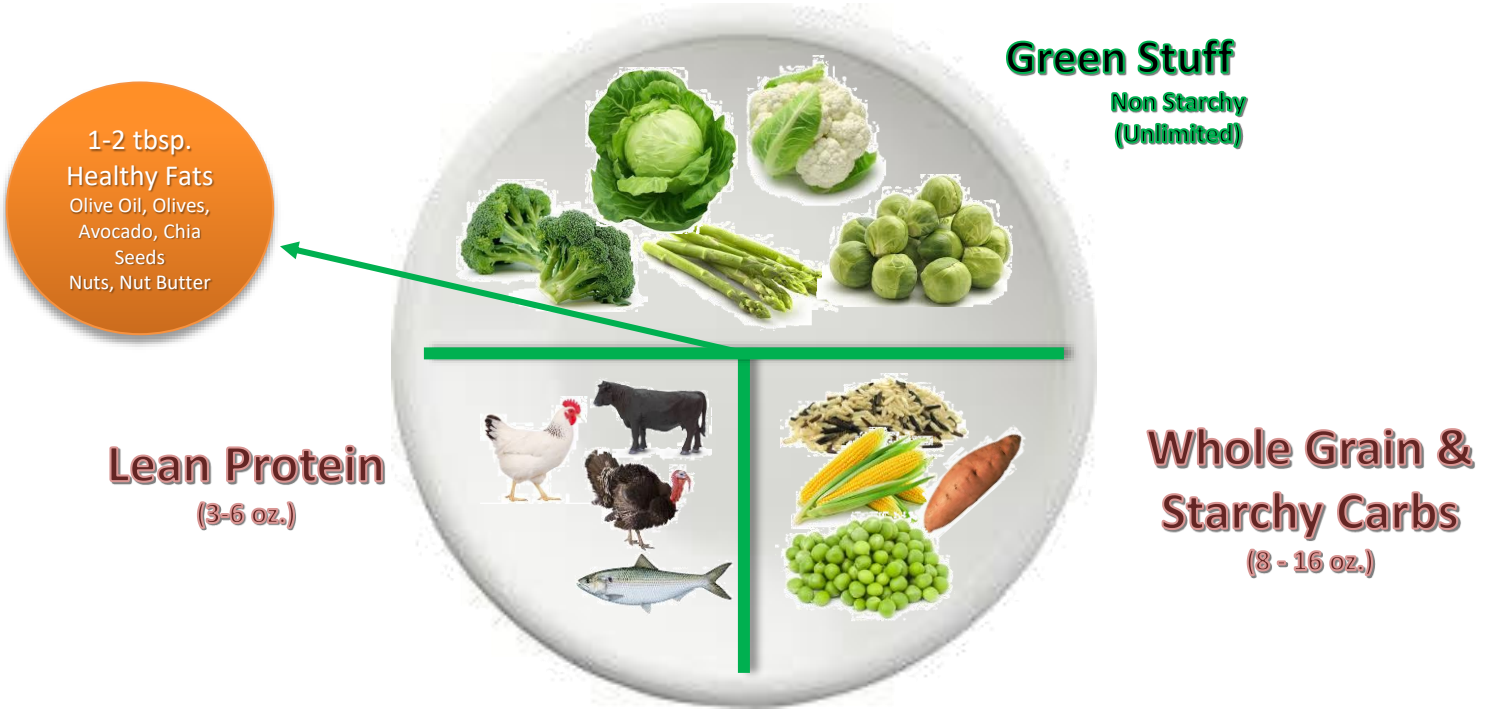
Food for your health

- **Green Tea** - drink 4-5 cups a day speed up your metabolism and even burn more calories in your sleep
- **Roasted Brussels Sprouts** - They're excellent weight loss foods
- **Chicken** - supply of protein content, the supply of essential vitamins and minerals, benefits in losing weight, cholesterol control, blood pressure control, and a reduced risk of cancer

What can I do to live healthy (Cont.)

- Know your (BMR) Basal Metabolic Rate - is an estimate of how many **calories** your body burns at rest. It represents the minimum amount of energy needed to keep your body functioning, including breathing and keeping your heart beating.
- Eat to Your BMR https://www.bodybuilding.com
- Become a Burner not a Dieter
- Tape Measurer vs Weight Watcher
- A hand full
- Consistency not Perfection

What can I do to live healthy (Cont.)



Exercise

physical activity that is done in order to become stronger and healthier. : a particular movement or series of movements done to become stronger and healthier. : something that is done or practiced to develop a particular skill

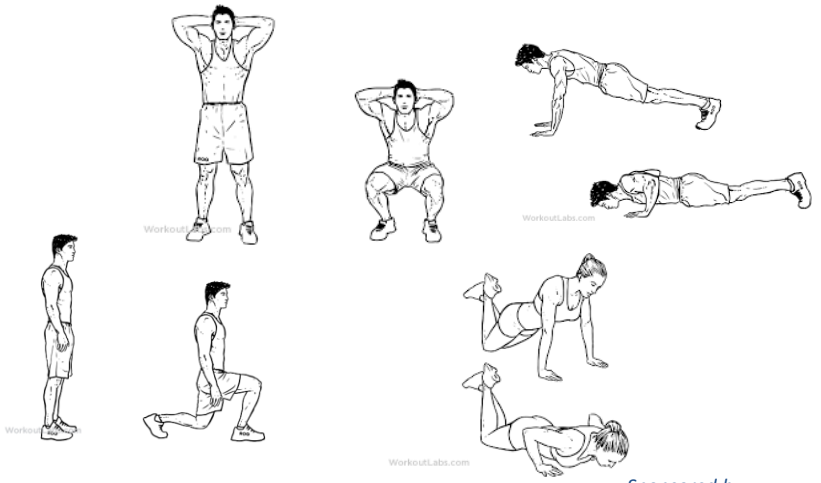
Fitness – 5 Fundamentals

- A warmup.
- A cardiovascular (aerobic) workout.
- Resistance (strength-building) exercises.
- Flexibility moves.
- A cooldown

Simple Workout

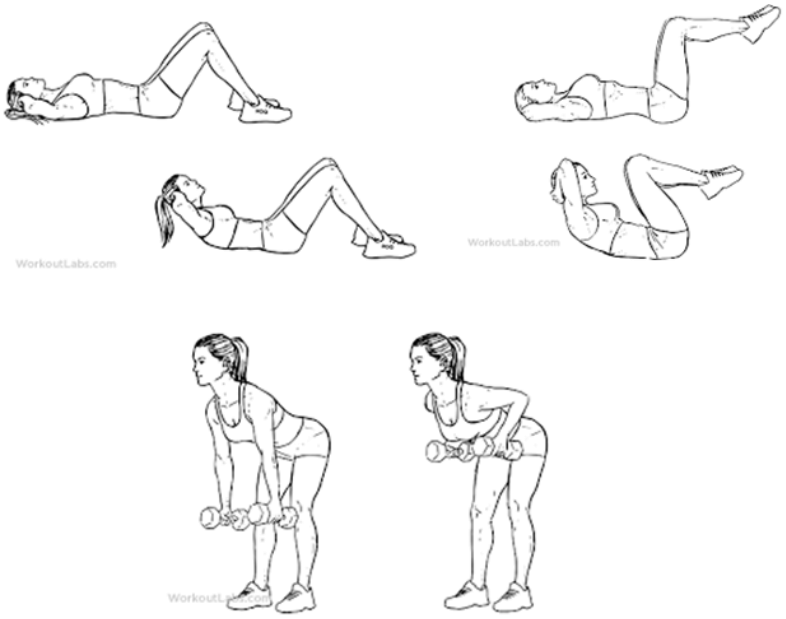
- **Walk** – at least 20 minutes, have good shoes, rule-of-thumb 500 miles (cardio/muscle)
- **Interval training** – up pace 1-2 back off 2 – 4 (cardio/muscle)
- **Squats** – 12 reps - Keep your knees right over your ankles (muscles)
- **Lunges** - Bend your front knee to about 90 degrees (lower muscles)

- **Push-ups** - Facing down, place your hands slightly wider than shoulder-width apart. Place your toes on the floor. If that's too hard, start with your knees on the floor (chest, shoulders, triceps, and core muscles)



Simple Workout

- **Crunches** - lying on your back with your feet flat on the floor and your head resting in your palms. Press your lower back down (abdominal muscles)
- **Bent**-Over Row -Stand with your feet shoulder-width apart, bend your knees, and bend forward at the hips. Engage your abs without hunching your back. Hold weights beneath your shoulders, keeping your hands shoulder-width apart. Bend your elbows and lift both hands toward the sides of your body. (upper back, as well as your biceps)



Just Exercise

- **Walk** - meaning take stairs, park further away, never take the easy route.
- Work in the yard
- Pick a sport you enjoy
  - Swim
  - Bike
- Work the hard
- Go Dancing
- Keep it in sight

Vitamins

Vitamins

Vitamins are essential for the normal growth and development of a multicellular organism

Vitamins

Vitamin generic descriptor name	Vitamer chemical name (s) (list not complete)	Solubility	United States Recommended dietary allowances (male, age 19 –70)[8]	Deficiency disease	Upper Intake Level (UL/day)[8]	Overdose disease	Food sources
Vitamin K	Phylloquinone, menaquinones	Fat	120 µg	Bleeding diathesis	N/D	Increases coagulation in patients taking warfarin.[20]	Leafy green vegetables such as spinach, egg yolks, liver
Vitamin E	Tocopherols, tocotrienols	Fat	15.0 mg	Deficiency is very rare; sterility in males and abortions in females, mild hemolytic anemia in newborn infants[18]	1,000 mg	Increased congestive heart failure seen in one large randomized study.[19]	Many fruits and vegetables, nuts and seeds
Vitamin D	Cholecalciferol (D3), Ergocalciferol (D2)	Fat	10 µg[17]	Rickets and osteomalacia	50 µg	Hypervitaminosis D	Fish, eggs, liver, mushrooms
Vitamin C	Ascorbic acid	Water	90.0 mg	Scurvy	2,000 mg	Vitamin C megadosage	Many fruits and vegetables, liver
Vitamin B_9	Folic acid, folinic acid	Water	400 µg	Megaloblastic anemia and deficiency during pregnancy is associated with birth defects, such as neural tube defects	1,000 µg	May mask symptoms of vitamin B_{12} deficiency; other effects.	Leafy vegetables, pasta, bread, cereal, liver
Vitamin B_7	Biotin	Water	30.0 µg	Dermatitis, enteritis	N/D		Raw egg yolk, liver, peanuts, leafy green vegetables
Vitamin B_6	Pyridoxine, pyridoxamine, pyridoxal	Water	1.3–1.7 mg	Anemia[15] peripheral neuropathy	100 mg	Impairment of proprioception, nerve damage (doses > 100 mg/day)	Meat, vegetables, tree nuts, bananas
Vitamin B_5	Pantothenic acid	Water	5.0 mg[13]	Paresthesia	N/D	Diarrhea; possibly nausea and heartburn.[14]	Meat, broccoli, avocados
Vitamin B_3	Niacin, niacinamide, Nicotinamide riboside	Water	16.0 mg	Pellagra	35.0 mg	Liver damage (doses > 2g/day)[12] and other problems	Meat, fish, eggs, many vegetables, mushrooms, tree nuts
Vitamin B_2	Riboflavin	Water	1.3 mg	Ariboflavinosis, glossitis, angular stomatitis	N/D		Dairy products, bananas, popcorn, green beans, asparagus
Vitamin B_{12}	Cyanocobalamin, hydroxocobalamin, methylcobalamin, adenosylcobalamin	Water	2.4 µg	Pernicious anemia[16]	N/D	Acne-like rash [causality is not conclusively established].	Meat, poultry, fish, eggs, milk
Vitamin B_1	Thiamine	Water	1.2 mg	Beriberi, Wernicke-Korsakoff syndrome	N/D[10]	Drowsiness or muscle relaxation with large doses.[11]	Pork, oatmeal, brown rice, vegetables, potatoes, liver, eggs
Vitamin A	Retinol, retinal, and four carotenoids including beta carotene	Fat	900 µg	Night blindness, hyperkeratosis, and keratomalacia[9]	3,000 µg	Hypervitaminosis A	Liver, orange, ripe yellow fruits, leafy vegetables, carrots, pumpkin, squash, spinach, fish, soya milk, milk

- Make sure you use to help, don't overdose
- Research your personal needs (You)
- If your on medications and if medical problems exists check physician
- Lastly – take with food – personally better


FIRE CHIEF
TEXAS
STATE FIREFIGHTERS' & FIRE MARSHALS' ASSN
ORG. 1876
ACADEMY

My Focus

You

Motivation

- **First and Foremost – feel better each day**
  - To live
  - To provide for my family
  - To do more
  - To give more
  - To not give up

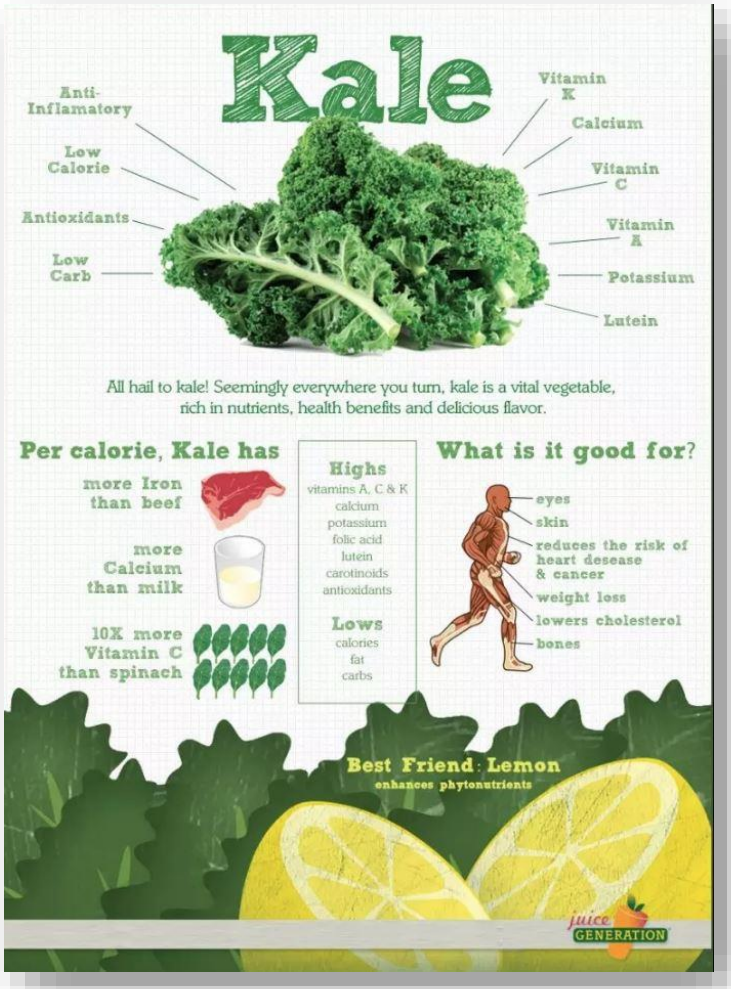
Exercises

Workout

- Arms, legs and abs (Resistance)
- Cardiovascular

Food

- **Kale** - lowers blood pressure, and fights against ocular diseases, looks after our nervous systems, calcium, antioxidants, healthy digestion system, provide cardiovascular support, omega-3 fatty acids, great detox ingredient
- **Spinach** - high in niacin and zinc, as well as protein, fiber, vitamins A, C, E and K, thiamin, vitamin B6, folate, calcium, iron, magnesium, phosphorus, potassium, copper, and manganese
- **Ginger** - relieving digestive problems such as nausea, loss of appetite, motion sickness and pain
- **Molasse** - Blackstrap molasses contains vital vitamins and minerals, such as iron, calcium, magnesium, vitamin B6, and selenium



Food

- **Cinnamon** - High Source of Antioxidants. Contains Anti-inflammatory Properties. Protects Heart Health. Fights Diabetes. Helps Defend Against Cognitive Decline & Protects Brain Function. May Help Lower Cancer Risk. Fights Infections & Viruses. Protects Dental Health & Freshens Breath Naturally
- **Cilantro** - good source of vitamin C, along with phosphorus, potassium, zinc, dietary fiber, calcium, iron, and magnesium
- **Parsley** - excellent of vitamin K and vitamin C as well as a good source of vitamin A, folate and iron
- **Avocado** - naturally nutrient-dense food and contain nearly 20 vitamins and minerals
- **Chia Seeds** - are a concentrated food containing healthy omega-3 fatty acids, carbohydrates, protein, fiber, antioxidants, and calcium

Food

- **Peanut Butter** - has protein as well as potassium — which lowers the risk of high blood pressure, stroke and heart disease.
- **Banana** - contain several essential nutrients, and have benefits for digestion, heart health and weight loss
- **Plant Fusion (Protein Mix**) - The only plant-based protein shake that compares to whey; enhanced with 4500mg of branched chain amino acids (BCAA) and 3,350mg of glutamine PlantFusion is a complete and extremely potent source of protein by any standard. The first plant-based protein that compares to animal proteins (like whey) in amino acid density and balance.

Any of these or other food products make sure YOU can handle the intake of nutrition

What can I do to live healthy (Cont.)

Nutritional Ground rules

- **Avoid eating a starchy carbohydrate** (fruit) by itself include a protein (nuts) and/or fat.
- **Stop eating** 2 – 3 hours before bed Sleep 7 – 8 hours
- **Make you the priority**
- **Drink Water** - – ideal your weight times 2 in ounces
- **Exercise for 20 minutes** – 60 minutes – 4 – 5 times a week
- **Eat breakfast or snack** 45 – 60 minutes after working out or after waking (1 cup of water immediately)
- **Eat every 4 – 5 hours**, ideally 3 meals, 1 snack with dinner being the smallest meal

Injury Prevention

RESEARCH INTERESTS

Conclusion

Risk Management/Safety Programs

Risk Management Committee Responsibility

- Facilities
- PPE/SCBA
- Health and Wellness
- Vehicle Maintenance
- Public Education / Relations
- Scene Operations / Safety
- Communications

- Accountability
- Incident Management
- Exposure Control
- Crew Resource Management
- Workplace Safety
- Education
- Administration

- Disaster Preparedness
- Hazardous Materials
- Preplanning
- Vehicle Operations
- Incident Reporting
- Water Supplies

Group Activity

List on paper how many safety hazards you find?

Homework Assignment

- **Assignment**
  - Develop one Risk Management policies for your agency Examples:
    - Driving and Driver requirement policy
    - PPE wearing and inspection policy
    - Requirements for Fireground Strategy and Tactics in relation to Resource availability
  - Develop one Training policy for the members of the department addressing positions and ranks per certification requirements.